

Roberto Reitsma
91-92 Book II

Denise Clonche

Gulley Forest 15 March Chapin

Pt 14 617 4070
Sp br Wren 1 ✓
RT Hummer 1
Social Fly 11
C. W. Tanager ①
Wilson's Warb 1
Red breasted Sapsucker ①
Green heron 1
Cl Col Robin 1

Caribb Euphonia ①
YF Euphonia ①
RCA Tanager ①
Brown Jay ①
Sc. Kinglet ①
GB Sparrow 1

CSWA 1
HO Oriole 1
LEPL ①

Pt 15 632 7090
Redbreasted 1 ✓
BT Salt 11
YB Cacique 1(1)
Sp br Wren ①
RT Salt 1
Attila ①
WNT Screecher 1

Yell Warb 1 ✓
Grass Col Tan 1
RT Hummer 1
YBFL 1 (1) 12m
Common T. Fly 1
Wilson's 1
RT Tanager ①
Mazzy ①
LEPL ①

Pt 16 648 7590
YB Fly 10
W Drop ①
Sp br Wren ①
Mazzy 1
Red breasted P ①
WNT ①
Wilson's ①

RT Hummer
BBFWC ①(1)
Social Fly ①
RT Salt 1(1/1)
D. Antbird ①
YBFL 1 ✓
W. Blackbird ①
Yellow Warb RT Salt ①

Pt 17 701 3570
W. Blackbird 11
Yellow Warb 1 12
Social Fly ①
Masked Tanager 11
YBFL ①
Cl Col Robin 1
BBFL 1 ✓

RT Salt ①(1)
Br. Fly 1
A. W. G. Fly ①
BBFWC ①
YBFL 1
Sitta 1
Wilson's ①

Pt 18 718 4570
B. Antshrike 1
W. Blackbird ①
GB Sparrow 1
YBFL 1
Social Fly ①
B. B. Warb 5
RT Salt 1
Sp. Cuckoo ①

Chachalaca ①
Sc. Kinglet ①
YBFL 1
Sc. Kinglet 1
Wilson's 1
Cl Col Robin ①

Pt 19 733 7570
Social Fly ①
C. Hummer 1
W. B. Emerald 1
Wilson's 1 ✓
YBFL 1
RT Hummer 1

YBFL 1 (Flyover)
Mazzy 1
Yellow Warb ①
D. Antbird 1
Sp. B. Wren ①

Pt 20 746 7090
Sp br Wren 1
YBFL 1 ①
W. Blackbird ①
Brown Jay ①
Cl Col Robin ①
GB Sparrow 1
Attila 1

Wilson's 1
Yell Warb ①
B. Antshrike ①
GB Sparrow ①
RT Hummer 1
YBFL ①
Trop Mocking 1

1.

1992

Kentucky h	L	10.8	10L
W. Bush Wren	L	10.7	16L
2 Sp. Br. Wren	L	"	"
Dickc. Aukbird	L	10.8	18L
Bushhill h		11.4	8L
2 Chachalaca	S	11.3	7L 4/12
Kentucky			
Hooded h		11.9	6L
Wilson h		12.5	6L 3/10
Ovenbird h		12.2	20R
Redstart		12.6	10R 14w

03 Euphonia h		65	17L
Sp 12	Wren h	19.1	20R
Barnard	Antelope h	19.4	20R
UBEL	h	19.2	7L
Barnard	h	19.7	6R
UBEL	h	19.1	13R
UBEL	h	19.6	17R
20 GCS		17.2	
UBA	h	Spider	5 3-10
3x36	h	Wasp	4 11-10
2x6	h	Wasp	4 11-10
5x12	h	Wasp	5 11-10
3x9	h	Spider	4 11-10
2x5	h	h	9 11-10
2x12	h	Spider	5 11-10
2x6	h	Wasp	4 11-10
5x5	h		
2x12	h		
2x9	h		
5x12	h		
2x30	h		
5x5	h		
2x15	h		
7L			
6x20	h	Spider	6 11-10
5x16	h	Spider	4 11-10
5x22	h	Wasp	3 11-10
3x12	h	Colopt	8 11-10
3x20	h	Wasp	12 11-10
3x8	h	Wasp	2 11-10
1x10	h	Wasp	15 11-10
2x6	h		
2x12	h		
5x11	h		
5x11	h		
2x6	h		
4x10	h		
4x10	h		

635-95

Chizote 735 745 845 830

10 Dec 91 SARUB POTRERO Uruguay

Temp	Anybird L	19.2	20R	
LEPL	L	19.6	2L	
CIT	L	19.7	2R	
South Anne Wren	L	19.2	5L	
Carb	L	19.8	15R	
Can Goby Phyc	LS	19.8	11L	3/6
Philly Crane	L	19.1	13L	
LEPL	L	19.3	10L	9/11
Alouatta	L	19.5	20L	
CIT	L	18.6	16L	
Carb	L	18.8	11L	3/6
WCS	L	18.5	12R	
No. Oriole	L	18.3	10L	8/8
Yellow Warb	♂ ad	"	"	6/6
LEPL	S	18.2	20L	2/2
Carb	L	17.4	9R	
CIT	♂ ad	18.1	5R	3/6
YD Phyc	L	18.1	5R	1/6
Philly Crane	L	18.2	12L	
Yellow Warb	♀ S	17.8	19R	0/1
YD Phyc	S	17.7	6R	1/1.5
Carb	L	16.8	10L	
LEPL	L	16.3	7R	
Carb	S	16.3	1R	
CIT	L	16.6	5L	1/1
Carb	S	16.2	3L	1/1

Large Gleaning on Sunday ground
Section strategy
Gleaning

Wangf/h

148 5R

WCS	L	14.7	6L	
LEPL	L	14.8	9L	
CIT	S	14.7	7L	
10R	♂ ad	14.2	0.0	10/11
5	Carb	13.8	6L	
Yellow Warb	♀	14.1	2L	9/11
2	Washed Tanager	13.7	1L	2/2
2	K/O Tanager	14.1	2R	10/11
12	Washed Tanager	14.1	2L	9/11
12	Washed Tanager	12.8	9R	
12	Washed Tanager	13.4	10R	9/11
3	No Oriole	12.8	9R	
Nashville Warb	S	12.1	9R	3/4
Carb	L	11.7	6R	
WCS	L	10.9	11R	
"	L	10.5	3R	
Carb	S	9.9	1R	
Cruciate Warb	L	9.9	14L	
Philly Crane	S	9.5	1L	
CIT	L	9.9	10R	
2	LEPL	7.3	16R	
WCS	L	7.3	8R	
Philly Crane	L	7.9	7L	
Carb	L	7.1	7L	
"	L	7.1	11L	
CIT	L	7.1	6R	
Philly Crane	L	6.1	10R	
Cruciate Warb	L	5.9	0.0	1/3
Yellow Warb	L	5.1	8R	
2	Washed Tanager	4.2	18L	
Philly Crane	S	4.5	4L	
Carb	S	3.9	7L	0.5
CIT	L	3.2	3R	
LEPL	L	3.1	15L	
Carb	L	2.9	8R	1/5
CIT	L	2.5	11L	
Philly Crane	L	2.3	4L	
Carb	L	1.3	1R	

• Leafy "Shrub" - after all
 rain rain

1/2 Cannon Col Tom s	1.9	16R	-13
CYT ad s	1.6	5R	4
2 WFL		"	
B/G Warbler s	1.3	6L	5/8
CYT ♀ s	1.4	3L	
B.R. Fly	1.5	17R	
Carbo s	1.3	14R	
ZWCS s	0.7	7R	
WFL s	1.3	2R	0.2
WFL s	0.7	9L	
WFL s	0.1	13L	
WFL h	0.7	15L	

BVGS	78	15/11	
1/2 WFL	1/2 WFL	Colony 2	5/2 15
2/2 WFL		Spide 2	1/2 15
5/11	7m		
2/7			
LEFL	10	Queen Bird	1
CYT	11	End Bird	5
Carbo	10		CH
Alouatta	2		
Alouatta	4		
Yellow Warb	4		
Wilson's	1		
End Bird	4		
Wilson's	1		
Wilson's	1		
Wilson's	2		

11 Dec	199	12	20/20
Redstart s	19.5	17L	
WFL h	19.9	10R	
WFL h	18.8	7L	9/4
WFL h	18.5	7R	
WFL h	18.2	5L	
WFL h	17.4	18L	
WFL s	17.3	14R	20/23
B. gnat	17.5	16L	17/22
B. gnat	16.8	6R	23/25 leg
Wilson's h	17.1	15L	
Wood Thrush h	17.2	12L	
2/2 WFL	17.1	16R	1/14
VT Euph	"	3L	2/10
Redstart s	"	5L	3/10
2/2 WFL	16.9	6R	17/23
WFL h	16.9	6R	0.5/7 gap
Wood Thrush h	16.7	8R	
Redstart s	16.7	13R	15/23
WFL h	16.5	12L	0.5/10
WFL h	16.6	10L	
WFL h	16.2	5R	
Chest Sp. Warb h	15.9	00	19/22
B. gnat	15.9	20R	16/20
WFL h	15.8	19L	
Wood Thrush h	15.8	18L	
2/2 WFL	15.2	10L	
WFL h	15.3	8L	
Wilson's s	14.8	8R	13/16
2/2 WFL	14.9	11L	
Redstart s	14.9	5L	8/20
B/G Warbler s	14.6	4L	7/15
Wilson's s	14.6	"	
Wilson's h	14.8	15R	
Wilson's h	13.7	9L	
Wilson's h	12.6	3L	
Wilson's h	14.6	7R	
Wilson's s	11.6	4L	4/5
Wilson's s	10.7	12	21/22

C

Land area 100 acres in Bush 1.68

Long-billed Thrush	100	2R	
YBPC	9.8	7R	1/18"
W. Siskin	9.5	5R	5/15
W. Bluebird	9.6	2R	
For. Hummer	9.1	10L	
Mourning	8.6	5R	
"	8.4	8L	24/25
2 Linn. Towhees	8.3	12L	
Blk. Hd. Salt	7.5	9R	2P
2 No. Oriole		8L	2L
Dusky Cap Flyc.		5L	19
Blue-back Flyc.		7L	18/22
Royal Flyc.	7.5	8L	20
Redstart	7.3	17R	14/22
Blue-winged	7.2	17R	"
2 Mourning Vireos	7.3	12L	16/22
W. Siskin	7.1	17L	3/25
Blk. thr. Warbler	7.5	16L	
YBPC			
2 Linn. Towhees			
Blk. Thr. Towhee		13L	→ 7R
Str. Hd. Woodpeck			
W. Bluebird		6.5	
10 Flyc.			
House Finch			
Scrub Cap Flyc.			
Long-billed			
She Vireos			

For breakfast to
Linn. Towhee
11 to 12 W. Siskin

YBPC	6.8	17R	
Blk. Thr. Towhee	6.9	5R	
Blk. Thr. Towhee	6.8	14/12	
Blk. Thr. Towhee	6.8	15R	10/25
No. Oriole	7.1	15R	
Long-billed Thrush	4.9	13/12	
Mourning	5.1	18R	2/12
Redstart	4.3	2R	10/14
W. Siskin	3.8	5L	
W. Siskin	2.2	6L	
W. Siskin	2.7	5L	
2 Sp. C. Wren	2.3	9L	
V. L. Wren	2.2	1L	9/12
W. Siskin	2.2	8L	
2 Linn. Towhees	2.1	11L	11/25
W. Siskin	2.1	6L	2/3
"	1.3	7L	8/12
Redstart	0.9	6R	
Blk. Thr. Towhee	1.1	12L	
Redstart	7		
YBPC	4		
W. Siskin	4		
Blk. Thr. Towhee	3		
Wood Thrush	3		
Chet. Sid. Wren	1		
Blk. Thr. Towhee	1		
Mourning	6		
No. Oriole	3		
Long-billed Thrush	1		
YBPC	1		
Centurus Wren	1		
	41		

Star & Noddy 107 10R

Cloudy

Sun 10/9/10

12 Dec ACH/HL

D. L. H. L. h	10.9	10R	
Red-tailed T. h	12.9	2R	2/10
Red-tailed T. h	10.4	9L	8/9
No. Waterbury h	19.3	7L	1/9
Wedge-bill h	19.1	5L	
Mayer h	19.1	20R	
Sp. L. h	19.1	10R	
White-bell. L. h	19.1	1L	
Buff. H. Salt	19.2	13R	
Little L. h	10.2	0.0	
D. L. H. L. h	19.1	6L	1/8
Mayer h	18.9	7R	
Wilson h	18.9	10R	
2 Red Crown Ad T. h	19.3	9L	
Sl. H. T. h	18.9	5L	1/7
3 Red-tail Ad T. h	18.8	12L	
C. L. h	18.6	6L	
K. L. h	18.7	9R	
Buff. H. Salt S	18.5	5L	1/9
Wilson h	18.6	6L	
RTN h	18.8	14L	1/10
Red-tail T. h	18.7	4R	
Chest S. h	18.6	1L	1/9
Wilson h	18.5	10L	1/8
Wilson h	18.1	1R	
Wilson h	18.3	5R	1/8

10/9 off on the way at end

Kendrick h

18.2 5L

Loosely h	17.9	5L	
Gr. backed Sparrow h	17.9	17R	
Y. L. h	18.1	3R	
Sp. L. h	17.8	4L	
Mayer h	17.9	8L	2/8
Sp. L. h	17.7	7L	1/9
3 Red-tail Ad T. h	17.3	10, 20L	12/25
GO W. h	17.2	14/12	6/9
many clear but some water call			
RTN h	17.2	18R	1/9
Mayer h	17.1	6R	
Sl. H. T. h	16.8	8L	1/7
1 Red-tail Ad T. h	6.5	11R	9/10
Y. L. h	17.3	10L	
Sp. L. h	16.7	8L	1/7
RTN h	16.5	13R	
Sp. L. h	16.5	8L	1/7
Sl. H. T. h	16.5	8R	
Red-tail Ad T. h	16.6	3L	2/10
RTN h	16.3	2R	1/9
2 Red-tail Ad T. h	16.4	17L	
Red-tail Ad T. h	16.2	12L	
Red-tail Ad T. h	16.2	7R	8/10
Wilson h	16.1	10L	8/10
D. L. h	16.1	10L	
Wilson h	15.9	3/12	7/10
Gr. L. h	15.8	9L	1/2
Sp. L. h	16.1	8L	
RTN h	15.9	9L	1/2
Wilson h	15.6	11R	4/12
GO W. h	14.9	3R	8/11
Sp. L. h	15.1	6R	6/11
Sl. H. T. h	15.1	8L	
Sp. L. h			
Wilson h	15.1	7L	
Wilson h	14.8	6R	
Wilson h	14.8	6L	1/12
Wilson h	14.6	1L	

C

215 NW 2c 115 7L 8/13 ^{Vol}

Long tail Petrel	L	14.5	12	
Short tail Petrel	S	14.5	12	9/10 Cores
Dusky Petrel	L	14.4	13	
Sp. Pet. Wren	L	14.4	11	
Pinned Ant. Gull	L	14.1	14	4/10 Cores
Guadalupe Glaucous		14.1	9	7/10 Cores
Hawaiian Sead	SE	"	"	2/10 Cores
Jacquin	L	13.8	3	
Wilkes	L	13.8	6	
VB Cassin's	S	13.9	6	3/10 Cores

→ The broken of the mysterious
w/ 4/15, No call

3 Blk	Hd	Small	13.8	10 R
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Bewertung der Teilnehmer 13.8 K

[illegible]

Wh. the. Rob. in 13.4 11

12378

Long ball employees	62	22 3/4
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1948 131 72 75

Revised Estimate to 131 9/16

Ph Coll. March 1862

2 Sp 100 Wm	h 12 20L
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11. hours	12.6	15.2
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10-11-12	13-14-15	16-17-18	19-20-21	22-23-24	25-26-27	28-29-30	31-32-33	34-35-36	37-38-39	40-41-42	43-44-45	46-47-48	49-50-51	52-53-54	55-56-57	58-59-60	61-62-63	64-65-66	67-68-69	70-71-72	73-74-75	76-77-78	79-80-81	82-83-84	85-86-87	88-89-90	91-92-93	94-95-96	97-98-99	100-101-102	103-104-105	106-107-108	109-110-111	112-113-114	115-116-117	118-119-120	121-122-123	124-125-126	127-128-129	130-131-132	133-134-135	136-137-138	139-140-141	142-143-144	145-146-147	148-149-150	151-152-153	154-155-156	157-158-159	160-161-162	163-164-165	166-167-168	169-170-171	172-173-174	175-176-177	178-179-180	181-182-183	184-185-186	187-188-189	190-191-192	193-194-195	196-197-198	199-200-201	202-203-204	205-206-207	208-209-210	211-212-213	214-215-216	217-218-219	220-221-222	223-224-225	226-227-228	229-230-231	232-233-234	235-236-237	238-239-240	241-242-243	244-245-246	247-248-249	250-251-252	253-254-255	256-257-258	259-260-261	262-263-264	265-266-267	268-269-270	271-272-273	274-275-276	277-278-279	280-281-282	283-284-285	286-287-288	289-290-291	292-293-294	295-296-297	298-299-300	301-302-303	304-305-306	307-308-309	310-311-312	313-314-315	316-317-318	319-320-321	322-323-324	325-326-327	328-329-330	331-332-333	334-335-336	337-338-339	340-341-342	343-344-345	346-347-348	349-350-351	352-353-354	355-356-357	358-359-360	361-362-363	364-365-366	367-368-369	370-371-372	373-374-375	376-377-378	379-380-381	382-383-384	385-386-387	388-389-390	391-392-393	394-395-396	397-398-399	400-401-402	403-404-405	406-407-408	409-410-411	412-413-414	415-416-417	418-419-420	421-422-423	424-425-426	427-428-429	430-431-432	433-434-435	436-437-438	439-440-441	442-443-444	445-446-447	448-449-450	451-452-453	454-455-456	457-458-459	460-461-462	463-464-465	466-467-468	469-470-471	472-473-474	475-476-477	478-479-480	481-482-483	484-485-486	487-488-489	490-491-492	493-494-495	496-497-498	499-500-501	502-503-504	505-506-507	508-509-510	511-512-513	514-515-516	517-518-519	520-521-522	523-524-525	526-527-528	529-530-531	532-533-534	535-536-537	538-539-540	541-542-543	544-545-546	547-548-549	550-551-552	553-554-555	556-557-558	559-560-561	562-563-564	565-566-567	568-569-570	571-572-573	574-575-576	577-578-579	580-581-582	583-584-585	586-587-588	589-590-591	592-593-594	595-596-597	598-599-600	601-602-603	604-605-606	607-608-609	610-611-612	613-614-615	616-617-618	619-620-621	622-623-624	625-626-627	628-629-630	631-632-633	634-635-636	637-638-639	640-641-642	643-644-645	646-647-648	649-650-651	652-653-654	655-656-657	658-659-660	661-662-663	664-665-666	667-668-669	670-671-672	673-674-675	676-677-678	679-680-681	682-683-684	685-686-687	688-689-690	691-692-693	694-695-696	697-698-699	700-701-702	703-704-705	706-707-708	709-710-711	712-713-714	715-716-717	718-719-720	721-722-723	724-725-726	727-728-729	730-731-732	733-734-735	736-737-738	739-740-741	742-743-744	745-746-74
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Repetitive Spectral Analysis

✓ Drawing coll of some more quality

Wind Turbine 121 TR $\frac{0.2}{100}$

[illegible]

305 QUB 10

P. COURTES 13 DEC 91			
P+23	75m	113	20
Little Tern	1	Sunny Cloudy	655
Green Jay	1, 1		
YBPR	17m	Maggie	1
LB Gnatcatcher	(1)	Wren Gnatcatcher	(1)
Kentucky	(1)	ABW Wren	(1)
Belted	(1)	Dusky Cap	11
Caracara Falcon	1	G. G. Warbler	1

Px 24 NE 150m	715
Little Hermit 1	Thrush (1) (1)
Wood Thrush (1)	Gr G Phoe (1)
YBEL 1 10m	Redstart (1)
Yewings 1	Red Wren (1)
Warner Gnatcatcher (1)	Redstart (1)
Spadebill (1)	LB Gnatcatcher (1)

Pt 25	NE 150m	736
W.B. Woodpecker (1)		Callbird 1
G.B. Flyc (1)		W. Burner 1
Little Hermit (1)		Red-bellied 1
Thrush-like Man (1)		
G.F. Woodpecker (1)		

Pt 26	15 km	758
Long tail	1	
Little	11	

Gr G. Phc (1)		Lesson Gr G. Phc (1)	
PA 27	NS 15cm	820	
1392 (1) (1)	Green Saw (1)		
Gr G. Phc (1)	Gold Fr. (1)		

Pl	28	897
RT Ann Tan (1)	Spadebill 1	
2 Sp Br Wren 11	Towhees 1	
Dus Wren 111	ISC 1	
Legu Tail Wren 1	Masked Tan 111	
Wren (9) (1)	WB Wren 1	
10 Flycatcher	B. Wren 1	
Wren (1)	2 Gold finches 1	

Unio
pallidus. 50 wing bars, black
eye line.

144 DEC 191 POINT COUNTS
SPRUE - Chapel ca. Choluteca
(Astradees) ~~Chapel~~
642

[illegible]

30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990	1000
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1

Pl 17 (Get back on path along riv. Road
 from trail of pl 16. Pl 17 is in
 group of 30m from riv. on R. Look SE
 path leads to left 240
 2. Pl - no saw!
 Valley wide! (1)
 Pl 18 (1)
 Pl 19 (1)
 Pl 20 (1)

Pt 11	140m - before Paka-Mina	
Yellow Warb (1) (1) ♀		735
Red Blackb (1) (1)		Scrub T 1/2
Redst ♂	1	Yellow Warb
Varied Seed	1	Many
Y T Oriole (1)		G T (1)
WCS (1)		100 Toucan (1)



WLS 1 YB Tanager (4)
 Collared Aracuna Cuckoo (1)
 10 Brown (1) GB AM (1)
 Sooty (1)

Pt 18 - 150m from 17 along 2 track
 855

(3 Aracuna)

Yellow Warb 1♀ WLS 1
 Orchard Oriole 1 GB Sparrow (1)
 Scarlet Rump Tan 1 Spruebird 1
 BBA 1 Common Fly (1)
 GO wd pter 1 LTP 1
 Chat (1) C/T 1
 Ind Black (1) Brown Jay (1)

Pt 19 - follow 2 track 175m
 until path branches off to right.
 Take path ~ 30m to 19.

911

Killdeer (1) Spine-tail (1)
 Gr Oriole (1) C/T 1
 Rufous tail Wren 1 Ind Black (1)
 GB Sparrow (1) Little Hermit 1
 Yellow Warb (1) Mayfly 1
 BBA 1 Wilsons 1
 YF Oriole (1) Brown Jay (1)
 Spot-b Wren (1)

WLS Least Flyc - Background
 - like some some but not
 not and tall plants

Pt 20 Back on 2 track, passed across
 across following Entrance to
 into of banana clump
 Ind Black (1) WLS (1) 1
 Turkey Vulture (1) Sooty (1)
 C/T (1) GB Sparrow (1)
 Common Fly (1) Ind Black (1)
 Brown Jay (1) Brown Jay (1)
 Brown Jay (1) Brown Jay (1)

R. P. Point Counts
 Pt 14 - Flag - just after diag bridge
 - Blue flag
 - 8m path away from 10
 just up footpath

Pt 15 - In tree patch inside
 banana clump. (Flag out
 - 150m reachy where point 1)
 2-3 8m on path, inside
 banana clump

Pt 16 - 30m upriver from point
 Ceiba off to right on
 Shrub bed path and
 tree row

Pt 17 - bottom of hill off to
 left 10m left of path
 along Milpa border

Pt 18 - across two bridges. 20m
 upriver from 2nd bridge.
 Flag on big tree (point)
 Point ~ 10m away from
 river on Milpa Point
 spot on path

Pt 19 - Horn come in - 100m
 in Tall 2nd path near
 Tractor wheel track. Paint
 spot on Tree (dbh 13cm)
 to right. Flag to left

Pt 20 - Tractor path veers to
 left. Paint done ~~near~~
 First big tree ~ 20m
 2meters path. Flag
 on footpath

Pt 21 - Fallen stump w/
 lots of vegetation
 growing on it - Stump
 right in path. Paint
 ~ 8m away from Pt 19
 in Cana/dune veg. growth
 Paint Spot on tree bet
 path & point

Pt 22 - Cocoa Plantation
 Midway 25m across
 from footpath ~ 15m
 inside plantation.
 Paint Spot on tree near
 from point Flag
 on Cana side

Pt 23 - In Same Plantation
 15m across in plantation
 Paint Spot on tree

not
 10m
 15m

Pt 24 - Tree Chimp ^{coming from}
 almost dead - Paint done
 2meters off path at
 flag. Paint spot on
 tree just upwind

Pt 25 - just upriver from small
 point where vegetation
 low & trees. Long
 narrow field on left.
 Near freshly cut tree
 in right side path

Pt 26 - 10m upriver from huge
 tree in path to next
 Tree Chimp. Paint done
 right at flag.

LOWIA PART

Pt 2 - 100m upriver from Don Esteban
 entrance. Paint done on tree
 Flag on Cana corner
 Paint on Cecropia ~ 8m
 on plantation flag

Pt 1 - 150m upriver. On path where
 Flag first damaged. Draw
 2 lines into the path.
 Paint on large tree across
 from point

Pt 3 - Right by start of
Don Esteban in
Coffee grove
Bright where Pancha
Jorge is off
Point 15 meters inland

Pt 4 - 150m from river
from Pt 3 15m
inland Still in
Coffee grove

Pt 5 - 150m distance
At Edge of field
15m inland

Pt 6 - 150m along edge
of field. Near
Leymus trees
15m in

Pt 7 - 150m At border
in path Pancha
stump

Pt 8 - 150m In well
shaded tree clump
Point on tree in
mushy meadow

Pt 9 - 150m distance
in a line 15m from
side of road. Pancha
on line along side of road

Pt 10 - 150m 15m in
Along road corner
on left

Pt 11 - 125m at base
of huge tree

Pt 12 - 150m At small
acacia at edge of
banana grove. Point
at inland limit of
banana grove along
border of acacia

Pt 13 - 30m after bridge
on Cabao (Point)
15m in

17 DEC 2^o BOSQUE
PT. 29 150 NW of pt 23
817

YBFL (1)

L.HERN (1)

WBWren (1)(1) → 1

WBEMERAI (1)

C

IN CORNER OF HOUSE

15th Nov 1946

19 DEC 1946
 CR. 13 NOVEMBER 1946
 - found some from path
 to do

Pt. 21

11/11/46
 C. 13/11/46
 L. 13/11/46
 P. 13/11/46
 C. 13/11/46
 P. 13/11/46
 M. 13/11/46
 D. 13/11/46
 L. 13/11/46
 L. 13/11/46

13/11/46
 P. 1 - 13/11/46
 L. 13/11/46
 M. 13/11/46
 D. 13/11/46
 L. 13/11/46
 L. 13/11/46

13/11/46

Point 100 on
 100 yds. from
 to 100 yds. from

P-2-1252

13/11/46
 13/11/46
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 13/11/46

1.9-24 Lott
 for C. Lott
 27 Dec 1944
 845-510

Species	Sex	Age	Weight (g)	Wing (mm)	Tail (mm)	Notes
Redstart	h	0.7	2R			
2 Red-thr. Gnatcatcher		0.4	9L			
YBC h		0.7	15L			
2 Sp. b. Wren		0.1	10L			
CYT h		0.2	18L			
Yellow-r. vireo h		0.2	12L			9/5
UBRL h		0.7	5R			4/5
Wilson's h		1.1	15L			
LS Hermit		1.2	2R			1/6
2 Sp. Rump-Tan		1.4	7R			
wh. bel. Gnatcatcher		1.1	3R			
L. H. blue Wren		2.2	9R			Culture
CYT h		1.5	8R			
Black K. Wren	s	2.7	20R			
CYT h		3.1	18R			
Redstart h		3.1	19L			
WCS h		3.4	10R			
Tanager	s	4.3	00			
Wren h	h	5.3	20R			
UBRL		6.3	20L			
2 Red-bellied	s	6.4	20R			
Yellow Warbler	s	6.1	20R			
2 Sp. T. Salt		6.1	20R			
2 Mock Tan						
Tropical King	s	7.3	10R			dated 5/15/20
F. Wc	s	7.3	10R			

Item	Weight (lb)	Price (\$)	Notes
2.5 lb Good Doves	2.3	82	
1.5 lb Cambridge	3.6	92	
1.5 lb	8.6	52	
1.5 lb Seed	8.5	72	
1.5 lb Blue Hemp	8.8	12	3/4
1.5 lb Blue Hemp	8.7	52	
1.5 lb Blue Hemp	8.7	12	
1.5 lb Blue Hemp	8.5	92	
1.5 lb Blue Hemp	8.6	12	
1.5 lb Blue Hemp	9.2	82	
1.5 lb Blue Hemp	10.2	42	
1.5 lb Blue Hemp	10.6	52	
1.5 lb Blue Hemp	11.4	12	
1.5 lb Blue Hemp	11.4	92	
1.5 lb Blue Hemp	11.2	82	
1.5 lb Blue Hemp	11.6	22	
1.5 lb Blue Hemp	11.9	202	
1.5 lb Blue Hemp	12.2	12	3/4
1.5 lb Blue Hemp	12.2	122	
1.5 lb Blue Hemp	12.7	72	1/2
1.5 lb Blue Hemp	13.3	62	
1.5 lb Blue Hemp	13.5	62	1/2
1.5 lb Blue Hemp	14.4	182	
1.5 lb Blue Hemp	15.4	12	
1.5 lb Blue Hemp	16.8	132	
1.5 lb Blue Hemp	17.9	42	
1.5 lb Blue Hemp	17.3	122	
1.5 lb Blue Hemp	17.8	102	
1.5 lb Blue Hemp	17.7	72	
1.5 lb Blue Hemp	17.7	132	
1.5 lb Blue Hemp	17.7	12	
1.5 lb Blue Hemp	18.3	162	
1.5 lb Blue Hemp	18.3	182	
1.5 lb Blue Hemp	18.4	12	
1.5 lb Blue Hemp	18.4	122	
1.5 lb Blue Hemp	18.4	122	

Cheney

25 DEC BRN POTR:RN 415

Yellow Warbler	11	6R	1 1/2
Black-crowned Night Heron	0.9	10L	1 1/2
Sp. Towhee	2.2	20L	
Yellow Warbler	2.9	20L	1 1/2
Blue Phoebe	4.7	3L	
10 Phoebe	3.6	3R	1 1/2
10 Phoebe	3.9	1R	1 1/2
Sp. Towhee	4.5	20L	
Blue-crowned Night Heron	4.7	4L	1 1/2
10 Phoebe	5.2	17R	
Blue Phoebe	5.4	16R	
Sp. Towhee	7.7	20L	2 1/2
2 Towhee	9.5	10L	
3 Catbird	9.7	16L	
10 Phoebe	8.7	11R	1 1/2
10 Phoebe	8.7	20L	
10 Phoebe	9.7	10L	
7 Green Heron	10.1	15R	
2 Catbird	10.6	21R	1 1/2
10 Phoebe	10.8	11R	
10 Phoebe	10.7	7L	
Clay Col. Robin	10.7	20R	
2 Blue Jay	10.7	18R	1 1/2
10 Phoebe	10.9	11R	
10 Catbird	10.8	17R	1 1/2
10 Phoebe	11.1	15L	

CAT
Catalo

15

2012

1. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
2. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
3. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
4. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
5. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
6. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
7. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
8. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
9. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
10. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
11. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
12. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
13. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
14. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
15. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
16. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
17. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
18. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
19. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
20. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
21. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
22. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
23. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
24. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
25. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
26. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
27. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
28. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
29. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
30. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
31. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
32. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
33. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
34. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
35. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
36. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
37. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
38. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
39. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
40. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
41. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
42. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10
43. <i>Alouatta palliata</i>	12.4	151	100	80	20	15	10



458

24	M.	M.	F.	E.
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[illegible]

1. $\frac{1}{2}$ 2. $\frac{1}{3}$ 3. $\frac{1}{4}$ 4. $\frac{1}{5}$ 5. $\frac{1}{6}$ 6. $\frac{1}{7}$ 7. $\frac{1}{8}$ 8. $\frac{1}{9}$ 9. $\frac{1}{10}$ 10. $\frac{1}{11}$ 11. $\frac{1}{12}$ 12. $\frac{1}{13}$ 13. $\frac{1}{14}$ 14. $\frac{1}{15}$ 15. $\frac{1}{16}$ 16. $\frac{1}{17}$ 17. $\frac{1}{18}$ 18. $\frac{1}{19}$ 19. $\frac{1}{20}$ 20. $\frac{1}{21}$ 21. $\frac{1}{22}$ 22. $\frac{1}{23}$ 23. $\frac{1}{24}$ 24. $\frac{1}{25}$ 25. $\frac{1}{26}$ 26. $\frac{1}{27}$ 27. $\frac{1}{28}$ 28. $\frac{1}{29}$ 29. $\frac{1}{30}$ 30. $\frac{1}{31}$ 31. $\frac{1}{32}$ 32. $\frac{1}{33}$ 33. $\frac{1}{34}$ 34. $\frac{1}{35}$ 35. $\frac{1}{36}$ 36. $\frac{1}{37}$ 37. $\frac{1}{38}$ 38. $\frac{1}{39}$ 39. $\frac{1}{40}$ 40. $\frac{1}{41}$ 41. $\frac{1}{42}$ 42. $\frac{1}{43}$ 43. $\frac{1}{44}$ 44. $\frac{1}{45}$ 45. $\frac{1}{46}$ 46. $\frac{1}{47}$ 47. $\frac{1}{48}$ 48. $\frac{1}{49}$ 49. $\frac{1}{50}$ 50. $\frac{1}{51}$ 51. $\frac{1}{52}$ 52. $\frac{1}{53}$ 53. $\frac{1}{54}$ 54. $\frac{1}{55}$ 55. $\frac{1}{56}$ 56. $\frac{1}{57}$ 57. $\frac{1}{58}$ 58. $\frac{1}{59}$ 59. $\frac{1}{60}$ 60. $\frac{1}{61}$ 61. $\frac{1}{62}$ 62. $\frac{1}{63}$ 63. $\frac{1}{64}$ 64. $\frac{1}{65}$ 65. $\frac{1}{66}$ 66. $\frac{1}{67}$ 67. $\frac{1}{68}$ 68. $\frac{1}{69}$ 69. $\frac{1}{70}$ 70. $\frac{1}{71}$ 71. $\frac{1}{72}$ 72. $\frac{1}{73}$ 73. $\frac{1}{74}$ 74. $\frac{1}{75}$ 75. $\frac{1}{76}$ 76. $\frac{1}{77}$ 77. $\frac{1}{78}$ 78. $\frac{1}{79}$ 79. $\frac{1}{80}$ 80. $\frac{1}{81}$ 81. $\frac{1}{82}$ 82. $\frac{1}{83}$ 83. $\frac{1}{84}$ 84. $\frac{1}{85}$ 85. $\frac{1}{86}$ 86. $\frac{1}{87}$ 87. $\frac{1}{88}$ 88. $\frac{1}{89}$ 89. $\frac{1}{90}$ 90. $\frac{1}{91}$ 91. $\frac{1}{92}$ 92. $\frac{1}{93}$ 93. $\frac{1}{94}$ 94. $\frac{1}{95}$ 95. $\frac{1}{96}$ 96. $\frac{1}{97}$ 97. $\frac{1}{98}$ 98. $\frac{1}{99}$ 99. $\frac{1}{100}$ 100. $\frac{1}{101}$ 101. $\frac{1}{102}$ 102. $\frac{1}{103}$ 103. $\frac{1}{104}$ 104. $\frac{1}{105}$ 105. $\frac{1}{106}$ 106. $\frac{1}{107}$ 107. $\frac{1}{108}$ 108. $\frac{1}{109}$ 109. $\frac{1}{110}$ 110. $\frac{1}{111}$ 111. $\frac{1}{112}$ 112. $\frac{1}{113}$ 113. $\frac{1}{114}$ 114. $\frac{1}{115}$ 115. $\frac{1}{116}$ 116. $\frac{1}{117}$ 117. $\frac{1}{118}$ 118. $\frac{1}{119}$ 119. $\frac{1}{120}$ 120. $\frac{1}{121}$ 121. $\frac{1}{122}$ 122. $\frac{1}{123}$ 123. $\frac{1}{124}$ 124. $\frac{1}{125}$ 125. $\frac{1}{126}$ 126. $\frac{1}{127}$ 127. $\frac{1}{128}$ 128. $\frac{1}{129}$ 129. $\frac{1}{130}$ 130. $\frac{1}{131}$ 131. $\frac{1}{132}$ 132. $\frac{1}{133}$ 133. $\frac{1}{134}$ 134. $\frac{1}{135}$ 135. $\frac{1}{136}$ 136. $\frac{1}{137}$ 137. $\frac{1}{138}$ 138. $\frac{1}{139}$ 139. $\frac{1}{140}$ 140. $\frac{1}{141}$ 141. $\frac{1}{142}$ 142. $\frac{1}{143}$ 143. $\frac{1}{144}$ 144. $\frac{1}{145}$ 145. $\frac{1}{146}$ 146. $\frac{1}{147}$ 147. $\frac{1}{148}$ 148. $\frac{1}{149}$ 149. $\frac{1}{150}$ 150. $\frac{1}{151}$ 151. $\frac{1}{152}$ 152. $\frac{1}{153}$ 153. $\frac{1}{154}$ 154. $\frac{1}{155}$ 155. $\frac{1}{156}$ 156. $\frac{1}{157}$ 157. $\frac{1}{158}$ 158. $\frac{1}{159}$ 159. $\frac{1}{160}$ 160. $\frac{1}{161}$ 161. $\frac{1}{162}$ 162. $\frac{1}{163}$ 163. $\frac{1}{164}$ 164. $\frac{1}{165}$ 165. $\frac{1}{166}$ 166. $\frac{1}{167}$ 167. $\frac{1}{168}$ 168. $\frac{1}{169}$ 169. $\frac{1}{170}$ 170. $\frac{1}{171}$ 171. $\frac{1}{172}$ 172. $\frac{1}{173}$ 173. $\frac{1}{174}$ 174. $\frac{1}{175}$ 175. $\frac{1}{176}$ 176. $\frac{1}{177}$ 177. $\frac{1}{178}$ 178. $\frac{1}{179}$ 179. $\frac{1}{180}$ 180. $\frac{1}{181}$ 181. $\frac{1}{182}$ 182. $\frac{1}{183}$ 183. $\frac{1}{184}$ 184. $\frac{1}{185}$ 185. $\frac{1}{186}$ 186. $\frac{1}{187}$ 187. $\frac{1}{188}$ 188. $\frac{1}{189}$ 189. $\frac{1}{190}$ 190. $\frac{1}{191}$ 191. $\frac{1}{192}$ 192. $\frac{1}{193}$ 193. $\frac{1}{194}$ 194. $\frac{1}{195}$ 195. $\frac{1}{196}$ 196. $\frac{1}{197}$ 197. $\frac{1}{198}$ 198. $\frac{1}{199}$ 199. $\frac{1}{200}$ 200. $\frac{1}{201}$ 201. $\frac{1}{202}$ 202. $\frac{1}{203}$ 203. $\frac{1}{204}$ 204. $\frac{1}{205}$ 205. $\frac{1}{206}$ 206. $\frac{1}{207}$ 207. $\frac{1}{208}$ 208. $\frac{1}{209}$ 209. $\frac{1}{210}$ 210. $\frac{1}{211}$ 211. $\frac{1}{212}$ 212. $\frac{1}{213}$ 213. $\frac{1}{214}$ 214. $\frac{1}{215}$ 215. $\frac{1}{216}$ 216. $\frac{1}{217}$ 217. $\frac{1}{218}$ 218. $\frac{1}{219}$ 219. $\frac{1}{220}$ 220. $\frac{1}{221}$ 221. $\frac{1}{222}$ 222. $\frac{1}{223}$ 223. $\frac{1}{224}$ 224. $\frac{1}{225}$ 225. $\frac{1}{226}$ 226. $\frac{1}{227}$ 227. $\frac{1}{228}$ 228. $\frac{1}{229}$ 229. $\frac{1}{230}$ 230. $\frac{1}{231}$ 231. $\frac{1}{232}$ 232. $\frac{1}{233}$ 233. $\frac{1}{234}$ 234. $\frac{1}{235}$ 235. $\frac{1}{236}$ 236. $\frac{1}{237}$ 237. $\frac{1}{238}$ 238. $\frac{1}{239}$ 239. $\frac{1}{240}$ 240.

1998-1999

1980

1945

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11-11-1964

Year	Number of people (millions)
1980	18
1990	22
2000	26
2020	32

100

Dist. - 100. 15. Plan 720.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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3001 520

10

Lesson 6

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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150

10

2. 5 km of the N. side of the

04	4	0.0	11	1.00	7.52
05	5	0.0	11	1.00	7.52

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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4433

[Faint handwritten notes at the bottom of the page]

14	10
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11-11-11

2011.12.12

11-1-1

Year	Number of people (millions)
1980	18
1985	22
1990	26
1995	30
2000	34
2005	38
2020	42

Year	Number of people (millions)
1980	18
1990	22
2000	26
2020	32

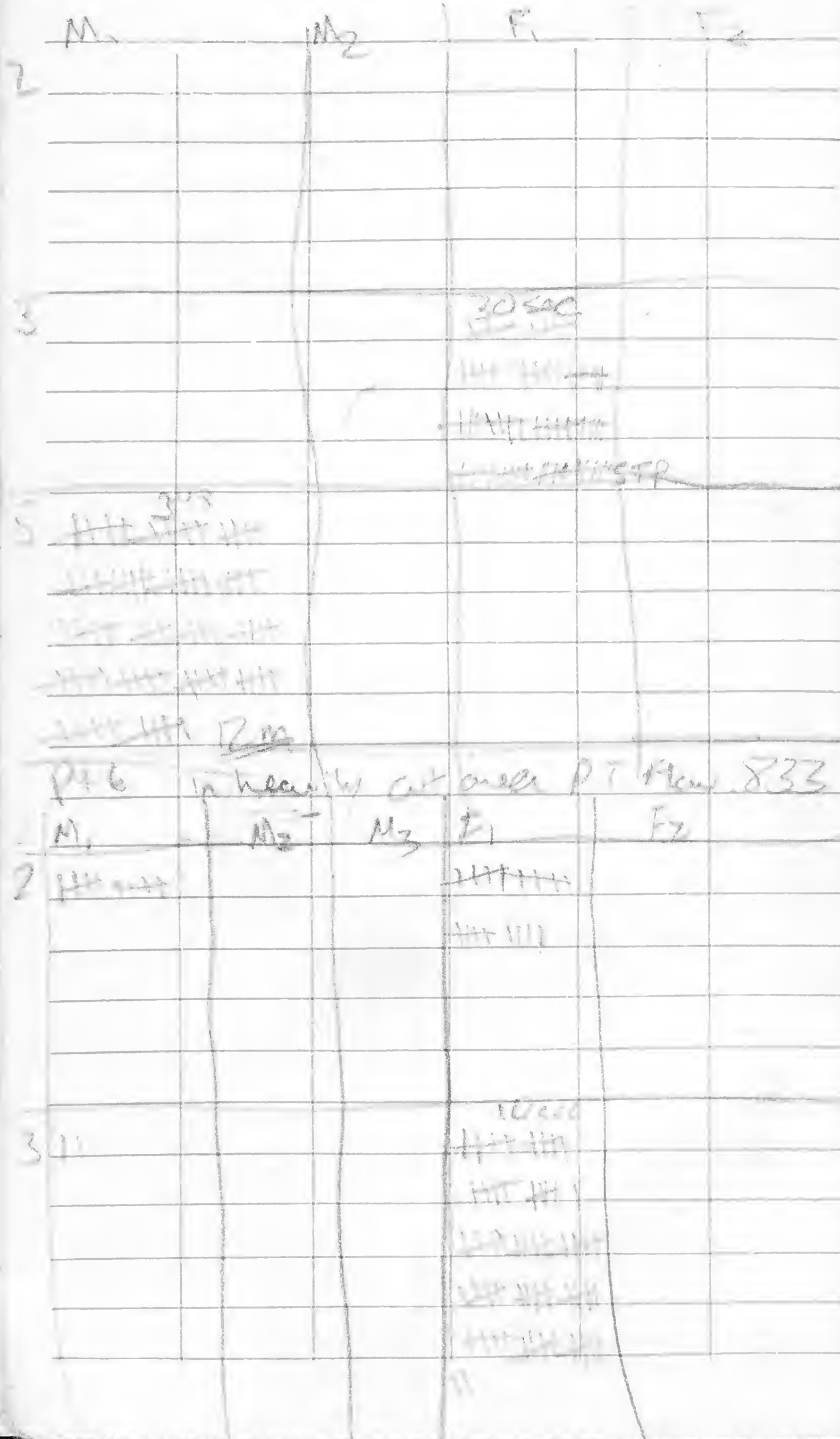
L. - L.

24

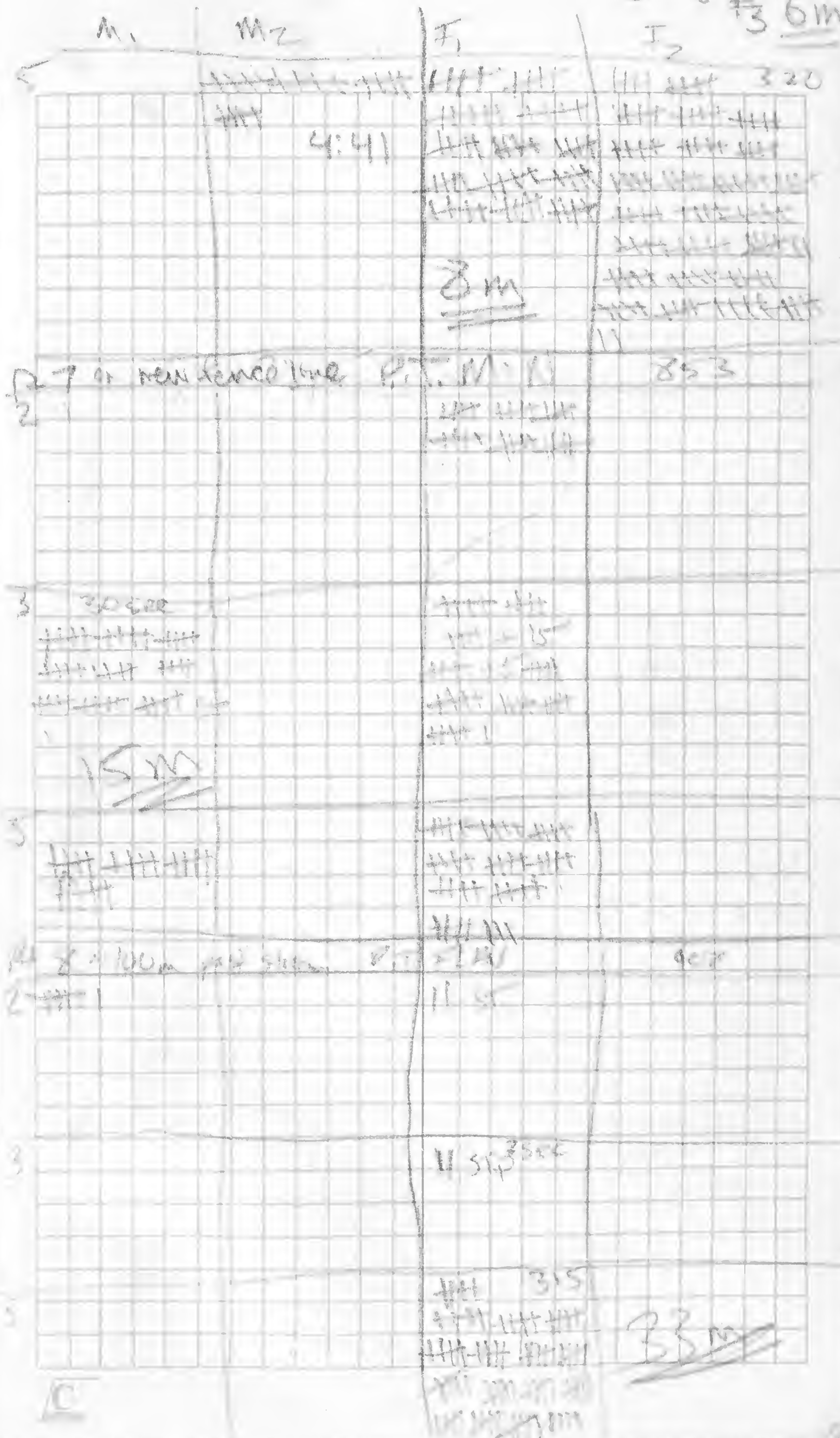
P45

P.T. Min

500



con 2 conto
in 5 min. pendic
F3 6m



$\mathbb{C} \otimes_k \text{Hom}(W, V) \cong \text{Hom}(W, V)$ for V, W k -vector spaces

Decid. Decid. on 1/1/92

VEGETATION SAMPLING MODIF'S

Edwards's Potrero

22 JAN 92

10-9 R

8-7 R

6-5 R

Sg 12

65

60

Tg 10

7

5

Ss 43

5

5

Ms 5

2

S2g 5

T2g 50

Bg 10

8

10

Stream 5

5

5

* Cleared 10

8

15

9-8 R

7-6 R

4-3

Bg 15

110

3

Sg 20

40

20

Tg 5

10

5

Ss 30

20

Ms 5

5

S2g

15

T2g 10

* Cleared 20

10

70

Sx 5

5

2

* Cleared = mix of slash & very short slash
25g.

5-4 R

5-4 R

50

35

10

10

18

12

5

7

40

110

5

5

5

3

35

20 Forest

23 JAN 92

Chap 708

21.5 10L

4/12 956

Tale Mark

21.5 12L

7/12

2 cap Mark

21.5 9L

7/12

21.6 7L

21.2 13L

7/12

21.5 10L

21.5 10L

7/12

21.2 11L

21.2 11L

9/22

20.1 18L

20.1 18L

9/26

20.1 20L

20.1 20L

9/26

19.6 8L

19.6 8L

9/13

19.7 8L

19.7 8L

9/13

19.9 16L

19.9 16L

9/13

19.9 16L

19.9 16L

9/13

19.9 16L

19.9 16L

9/13

Western to white up. Low

R.C. Duckworth	18.3	12L	9/16
W. Spadell h	16.8	12L	2/11
Leaves Greenlet	15.5	17R	
2 RT Ant Tan h	16.6	14R	7/3
Nooded h	16.2	10L	
RT Ant Tan h	"	15L	
Cr. Bil Sp h	15.8	7L	
W. B. Wren h	16.1	20L	
W. B. Wren h	15.9	16L	
W. B. Wren h	15.5	11L	4/10
RC Man & S	14.5	6L	7/11
Xenops h	14.2	9L	3/10
Leaves Greenlet	14.8	6R	
CSWA h	13.7	18L	10/11
RT Ant Tan	13.6	20L	1/11
RT Ant Tan h	13.5	11R	
RT Man h	13.5	16R	
Leaves Greenlet	13.5	16L	
2 Sphe Wren h	13.1	25R	
2 Greened Wren S	11.7	14R	
1 Wren S	"	"	
2 B. S	"	"	
W. B. S	"	"	
Leaves Greenlet	"	"	
RT Ant Tan	"	"	
RT Man. h	"	"	
W. B. S	"	"	

Vicarious Region	11.7	20R	9/14
RT Ant Tan	11.7	18R	
2 RT Ant Tan	11.5	10L	
Leaves Greenlet	11.4	3R	
2 RT Ant Tan	11.4	12L	
Leaves Greenlet	11.4	6R	13/15
RT Ant Tan	9.1	3R	7/15
RT Ant Tan h	9.5	19L	
W. B. Wren h	8.5	3R	7/12
2 Greened Wren h	8.7	20R	10/14
Leaves Greenlet	7.9	10L	
2 Greened Wren h	7.6	17R	
RT Ant Tan	7.8	11L	
RT Ant Tan	6.1	6L	9/15
Leaves Greenlet	6.2	15L	
2 Greened Wren h	5.5	20R	19/10
RT Ant Tan	3.5	11L	
RT Ant Tan	3.2	20L	
Leaves Greenlet	2.9	11L	1/15
2 Greened Wren h	3.1	13L	15/18
RT Ant Tan	3.1	18L	
Leaves Greenlet	3.4	14R	
RT Ant Tan	2.6	17L	
Greened Wren h	2.7	5L	24/23
W. B. Wren h	1.5	16R	14/15
Leaves Greenlet	1.5	10L	
RT Ant Tan	0.9	6L	15/12
RT Ant Tan	0.7	9R	
RT Ant Tan	0.5	4R	14/14
RT Ant Tan	"	"	1/20
2 Greened Wren h	0.5	19R	
RT Ant Tan	0.3	12R	
RT Ant Tan	10	10	10
RT Ant Tan	4	10	10
2 Greened Wren h	2.5	10	10
RT Ant Tan	5	10	10
RT Ant Tan	10	10	10
RT Ant Tan	5	10	10
RT Ant Tan	5	10	10
RT Ant Tan	15	10	10

C

76FL 3

Wood Thrush	3			
Mocker	2			
CSWA	4			
GCFL	2			
Catbird	5			
Mourner	1			
Redstart	1			
LEFL	1			
Panther	1			
Warbler	1			
	20			

11 left	8.5			
3012 HHT III		Hymenoptera	6	1/2 1/2
206 11		Caterpillar	10	gr 1/2
309 HHT	3	"		"
204 11		"	9	gr 1/2
3012 1		Caterpillar	40	" 1/2
206 11		Hymenoptera	20	1/2 1/2
3012 1		"	6	gr 1/2
204 11		Caterpillar	5	gr 1/2
3012 1		Caterpillar	10	1/2 1/2
206 11		Spider	5	gr 1/2
3012 1				
204 11				
3012 1				
206 11				
3012 1				

Foliage ht profile 2° Forest

550R	1, 9, 10	200	1, 3
	1.5, 6, 9, 11, 13	R	1, 2, 3
R	1, 11, 12, 14		0.5, 3, 4, 11, 17
	1, 5, 7, 8, 11, 14	R	0.5, 7, 13
R	0.5, 6		0.5, 6
500	0.5, 2, 9	150R	0.5, 2
R	1, 2, 4, 10, 18		0.5, 3
	0.5, 14	R	1, 3, 7, 10, 20
R	1, 13		1, 10, 11, 22
	1, 5, 8, 27	R	0.5, 2, 10
450R	1, 3, 9, 8, 14	100	0.5, 6
	1, 2	R	0.5, 4
R	1, 2, 9, 11-17		1, 7, 9
	1, 14	R	1, 7, 9
R	1, 10, 11		1, 2, 4, 8
400	0.5, 1, 3, 11, 12, 15	50R	0.5, 11
R	1, 2, 4, 9, 10, 11		1, 2, 15
	1, 2, 10, 12	R	1, 3
R	1, 9, 14		1, 2, 3, 10
	1, 2, 3, 6, 9, 10, 11	R	1
350R	1, 3, 4, 10, 12		0 +
	1, 4, 10	560	1, 2, 4, 5, 14
R	1, 2, 7, 8		1, 6, 9, 11
	1, 9		1, 3, 8
R	1, 8, 13		1, 10, 12
300	0.5, 4		1, 7, 12
R	0.5, 12		1, 2, 7, 8, 13
	0.5, 2, 5, 6		0.5, 9, 12, 13
R	0.5, 2, 3		1, 6, 8, 9
	1, 2, 5, 9, 13		1, 11, 13
250R	1, 3, 4		1, 8, 11
	0.5, 14		1, 4, 9, 21
R	1, 2, 9		1, 4, 7, 10, 15
	1, 11, 16		1, 4, 6, 20, 15
R	0.5, 2		1, 3, 5, 8
		70	1, 3, 5, 8
			1, 4, 7, 10, 14
			0.5, 5, 10, 11
			1, 3, 10, 12
		750	1, 5, 10

6 DU. PCT. RHO 23 CAN

CYT	h	19.5	2L	
B366	s	19.4	1R	1/1
CYT	h	"	4R	"
2nd Plant	h	19.9	8R	
W. Wall	o	19.2	7R	2/2
Redst int	o	19.1	5R	1/1
Cab	s	19.7	2R	
Sc Pump	o	19.4	7R	
Thb. S. Frick	o	19.4	7R	1/1
CYT	h	18.6	4L	
Cab	h	14.7	6R	
Cab	h	18.8	10R	
"	s, h	18.6	14L	0.0/1
2 YBL	h	18.2	11L	
Cab	h	17.9	10L	
C35	s	16.8	14L	1.0/1
CYT	h	16.5	21L	
CYT	h	15.8	9R	
Soc. Expts	s	15.1	51	
Cab	h	15.3	6L	
Oven	h	15.6	12L	
W. S. P. Hys			10	
V. P. Hys		15.8	0.0	13/10 Schz
V. P. Hys			8	
V. P. Hys			8	
V. P. Hys		15.5	12L	

20

Amorulus sp

2. Comp. Plan 11.5 of 1.

Species	Length	Wing	Tail	Weight
Sp. Br. Wren	15.5	6R	13.20	
Sp. Br. Wren	15.5	12L		
W. Wren	15.1	4L	3/4	
V. Z. P. S.	13.8	7L	3/14	
16.3	11.7	60L		
C. W. S.	11.1	13R		
C. W. S.	11.1	20L		
B. W. S.	11.3	19L		
B. W. S.	11.1	20L		
C. W. S.	11.1	7L		
Greenish Wren	9.2	5R		
15.1	2.5	6R	6/7	
C. W. S.	9.1	11R		
W. Wren	8.1	2R	1/2	
10.6	8.2	7R		
C. W. S.	7.4	6L		
C. W. S.	6.6	8R		
C. W. S.	5.8	10R		
C. W. S.	5.2	12R	0 5/2	
C. W. S.	4.5	17R		
C. W. S.	3.8	3L		
C. W. S.	3.9	14L	2/11	
C. W. S.	0.2	16R	1/2	

White	6
Red Bent	1
Yellow	3
Black	2
Green	10
VBC	4
Overb	1
Brown	1
Blue	1
Yellow	1
VBC	1
Overb	5
Manager	1
for	
	5

-1, 2, 8, 15
 +1, 5, 9, 11
 80 +1, 5, 7, 12
 +1, 4, 5, 9
 -1, 4, 8, 12
 -1, 2, 8, 12
 +1, 4, 7
 85 +1, 2, 4, 15
 -1, 4, 6
 1, 5, 8, 13
 +1, 2, 8, 13
 90 0.5, 2, 7-10
 -1, 5, 7

C

A 10x10 grid of squares, each containing a small, dark, irregular shape, possibly a seed or a small object, arranged in a pattern that suggests a larger, faint image.

C

VINES

GAPS 70

22-21R	4-	9-8R	1-	22-21R	10
L	4-		1-	L	40
21-20R	2-	8-7R	1-	20-19L	5
	3-		1-	19-18L	5
20-19R	1-	7-6R	-	18-17R	15
	2-		-	17-16L	25+10 ^{290%}
19-17R	1 ⁺	6-5R	-	17-16R	10
	-		-	15-14R	10
18-17R	1 ⁺	5-4R	-	14-13R	20+25
	3 ⁺		1-	11-10R	15+35
17-16R	2-	4-3R	-	10-9R	50
	3 ⁺		1-	10-9L	5
16-15R	1-	3-2R	-	9-8R	10+5
	-		-	9-8L	5
15-14R	-	2-1R	-	8-7R	25
	1-		1-	8-7L	10+15
14-13R	-	1-0R	-	7-6R	5
	-	L-	-	L	15+5
13-12R	-	GAPS	-	6-5R	-
	-	2-1L	15+10+10	L	10
12-11R	2-	R	15	5-4R	30
	2-	1-0L	40+50	L	40
11-10R	1-	1-0R	60	4-3R	5+5
	3-			L	35
10-9R	1-			3-2R	30
	1-			L	-

650 9-7-19

Let's go to the river - see if we can find out

615-1010

Rest of the day - 21-10-19

White-throated Sparrow	18.9	8L	
White-throated Sparrow	19.5	17L	
White-throated Sparrow	18.9	14L	
White-throated Sparrow	16.8	12L	9/15
White-throated Sparrow	19.7	6L	8/11
White-throated Sparrow	14.7	20L	
White-throated Sparrow	10.2	5R	1/15
White-throated Sparrow	19.3	20R	
White-throated Sparrow	18.5	17L	
White-throated Sparrow	18.9	3R	16/16
White-throated Sparrow	18.9	15R	13/18
White-throated Sparrow	18.5	79L	
White-throated Sparrow	11.5	12L	
White-throated Sparrow	17.2	7L	9/19
White-throated Sparrow	17.1	8L	
White-throated Sparrow	16.7	16R	3/15
White-throated Sparrow	17.5	10L	
White-throated Sparrow	16.8	0.0	17.5
White-throated Sparrow	16.8	7R	7/15
White-throated Sparrow	16.8	10L	
White-throated Sparrow	16.6	17L	3/18
White-throated Sparrow	16.4	13L	9/20
White-throated Sparrow	"	10L	2/26
White-throated Sparrow	16.5	16R	5/17
White-throated Sparrow	16.2	10R	
White-throated Sparrow	16.5	15L	
White-throated Sparrow	16.3	9L	1/13
White-throated Sparrow	16.5	8L	7/13
White-throated Sparrow	15.4	3	8/12
White-throated Sparrow	15.5	18R	7/26
White-throated Sparrow	15.9	10L	
White-throated Sparrow	15.2	8L	
White-throated Sparrow	15.1	17L	
White-throated Sparrow	15.1	14L	
White-throated Sparrow	14.7	3R	8/23
White-throated Sparrow	17.2	6R	5/25
White-throated Sparrow	17.1		
White-throated Sparrow	17.2	10L	
White-throated Sparrow	14.7	3L	

6 Hermit S	13.7	1L	
Red-bellied Flower h	12.9	12	14/22
S. B. Flycatcher h	12.3	5R	3/20
Low-bellied Flycatcher h	9.2	10R	2/20
Maggi h	11.8	10L	3/15
Br. Warbler S	12.1	3L	2/12
Wood Thrush h	11.3	10R	9/gap
Maggi h	10.5	9L	
Dusky Ant h	10.7	10L	
2 Sp. Wren h	10	8L	
Green Sh Vireo S	23		
Red-eyed Vireo h	9.7	14L	
Y.T. Vireo h	10.2	20L	1/25
Green Gnatcatcher h			
Doc. Wren h			
Bl. Sh. Tanager h	12		
Y.B.F.L. L	8		
W.B. Emerald S	9.8	4L	2/5
Ruby Flyc. h	9.7	11L	
W.T. Robin h	9.1	10L	
2 Chest. W. Fly h	9	7	25/16
L.T. Hermit h	9.3	4L	
W.B. Wren h	9.3	13L	
Sp. Cap Fly h	8.8	12L	
3 Tanager S	8.7	11L	3/27
Wood Thrush h	8.7	17L	
W.B. Wren h	8.6	17R	

76 Tanager	9.7	12R	
GC Warbler	8.4	10L	
Hermit S	8.3	20R	
GC Tanager			
2 W.B. Wren h	8.5	16R	
2 Red-bellied Flycatcher h	8.6	12R	
Hermit S	7.8	3L 1/2	
Red-bellied Flycatcher	7.5	2L	
Arilla h	7.5	10L	
Ben Hill	6.7	11L 2/10	
2 B. Gnatcatcher h	6.4	13R	
2 Ant Tanager	6.2	10R	
GC Tanager	5.7	12L	
BT Saboteur	5.2	15R	
Hermit S	3.9	5L	
GC Wren	3.3	10R	
W. Thrush	3.5	11L	
W. B. Flycatcher h	3.4	7L	
Y.B.F.L. h	0.9	20R	
2 Ant Tanager	0.9	15L	
GC Ant Tanager	1.1	10L 7/18	
GC Manakin	0.9	19R	
BT Sh. Tanager	0.8	10R	
Bl. Field Flycatcher		20R	
2 W. B. Wren	1.3	10L 7/21	
BUGS 1 Right			
4x7 II		Worm	4 Ant 7/10
5x10 I		Spider	6 ch 10
6x20 II		Coleop	5 red/gr 10
1x3 I		3 Worm	5 1/2 10
5x9 I		Catfish	4 10
3x9 II		Snail	4 10
4x10 II		Worm	4 10
2x15 II		Worm	4 10
4x10 III		Catfish	4 10
2x8 I		Spider	4 10
3x10 II		"	4 10
6x10 II		"	4 10
4x10 II		Unknown	12 10
4x10 II		Unknown	12 10
2x10 II		Coleop	5 10
2x10 II		Coleop	5 10
2x10 II		Coleop	5 10

22	Doc. 15.4	Ant. 1.5	22	15.4
1	15.4	22	15.4	1/10
2	15.4	22	15.4	1/8
3	15.4	22	15.4	1/8

c call a restraint low rapid
chur-chur-chur chur-chur
call note a higher single squeak
sometimes indicates form call

A blank sheet of graph paper with a grid pattern. The grid consists of horizontal and vertical lines forming small squares. There are three vertical lines visible, creating four columns. There are several horizontal lines visible, creating multiple rows. The paper appears slightly aged or off-white.

02/04/2014	6
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1	2	3
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2	4	3
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30/12	1
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75. 12, 13, 14

1	100	100
2	100	100
3	100	100
4	100	100
5	100	100
6	100	100
7	100	100
8	100	100
9	100	100
10	100	100
11	100	100
12	100	100
13	100	100
14	100	100
15	100	100
16	100	100
17	100	100
18	100	100
19	100	100
20	100	100
21	100	100
22	100	100
23	100	100
24	100	100
25	100	100
26	100	100
27	100	100
28	100	100
29	100	100
30	100	100
31	100	100
32	100	100
33	100	100
34	100	100
35	100	100
36	100	100
37	100	100
38	100	100
39	100	100
40	100	100
41	100	100
42	100	100
43	100	100
44	100	100
45	100	100
46	100	100
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89	100	100
90	100	100
91	100	100
92	100	100
93	100	100
94	100	100
95	100	100
96	100	100
97	100	100
98	100	100
99	100	100
100	100	100

1. Name	2. Roll No.	3. Date	4. Page No.
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Depth 4000 m

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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[illegible][illegible][illegible]

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Week	Time			
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93	10:00			
94	10:00			
95	10:00			
96	10:00			
97	10:00			
98	10:00			
99	10:00			

2450	24	01	95	161
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[illegible]

10

Species	Length	Wing	Tail	Weight
EPBL	9.1	10.2	10.2	10.2
Colaptes	9.6	10.2	10.2	10.2
LEPLS	10.7	11.2	11.2	11.2
Macropygia	10.4	10.2	10.2	10.2
Colaptes	9.7	10.2	10.2	10.2
LEPLS	11.3	11.2	11.2	11.2
Colaptes	11.1	11.2	11.2	11.2
Colaptes	11.2	11.2	11.2	11.2
Macropygia	11.3	11.2	11.2	11.2
Colaptes	12.1	11.2	11.2	11.2
Colaptes	3.3	11.2	11.2	11.2
Macropygia	13.6	11.2	11.2	11.2
Colaptes	13.9	11.2	11.2	11.2
Colaptes	13.7	11.2	11.2	11.2
Colaptes	13.2	11.2	11.2	11.2
LEPLS	13.6	11.2	11.2	11.2
Colaptes	13.6	11.2	11.2	11.2
Macropygia	13.7	11.2	11.2	11.2
Colaptes	14.5	11.2	11.2	11.2
Colaptes	16.1	11.2	11.2	11.2
Colaptes	15.9	11.2	11.2	11.2
Colaptes	16.7	11.2	11.2	11.2
Colaptes	16.8	11.2	11.2	11.2
LEPLS	18.1	11.2	11.2	11.2
Colaptes	18.5	11.2	11.2	11.2
Colaptes	18.3	11.2	11.2	11.2
Colaptes	19.2	11.2	11.2	11.2

Crack 300. Dried throat, when
in company
Not in
Rough in 2d

Species	1947	GR	1948
Red-throated Loon	14/2	3/2	1/2
Reddish Cuckoo	19/1	10/2	9/2
Redstart	14/2	4/2	2/2
Tree Sparrow	14/3	1/1	7/10 Aug
WBC	19/9	11/2	
Cabb h	19/9	10/2	

Bugs	20 LxH	
2nd + 1st	100%	4
1st + 1st	75%	6
2nd + 1st	3	10
2nd + 1st	1	10
2nd + 1st	2	10

[illegible]

CH	19
Life Exp	1
Water	2
Carbide	10
ETL	7
Int. Exp	1
Mono	6
MSO	2
Nas	1
SFA	1
Vol	2

MERRY CHRISTMAS

P-1	M ₁	3:30 cc	
	M ₂	4:15	
P-2	M ₁	4:20	6m
P-4	M ₁	2:30	
P-5	M ₁	3:00	
1110	M ₂	4:15	
		3	
		5	
		9.11	
P-6	M ₁	11	
	17		
		3-2	
		5	
		11	
P-7	M ₁	2:15	
	M ₂	5:55	

10. 3-10-11

M ₂	4:40		
Look up song of Ch. Col. Warbler & L.R. B.W.			
Sellinginella			
- bet moss fern			
- 5000			
River parakeet & woodpecker 9-130			
ISLAND FOREST 29 JAN			
055-940 (Rain forest) Cloudy			
1300	L	0.4	13R
2 Sp. Wren	L	0.4	15L
YT Euphonia	L	0.2	18R
1.1011 Wren	L	0.2	13R
Redstart	L	0.3	10R
W. Flycatcher	L	0.3	17R
10.10.10.10	L	1.1	12R
10.10.10.10	L	1.1	10R
10.10.10.10	L	1.3	12R
10.10.10.10	L	1.7	18R
10.10.10.10	L	1.4	16R
10.10.10.10	L	1.4	11L
10.10.10.10	L	1.6	6R
10.10.10.10	L	1.7	1R
10.10.10.10	L	1.8	20L
10.10.10.10	L	2.1	14L
10.10.10.10	L	2.3	11L
10.10.10.10	L	2.6	13L
10.10.10.10	L	2.3	11L
10.10.10.10	L	2.5	15L
10.10.10.10	L	3.3	21R
10.10.10.10	L	3.5	11L
10.10.10.10	L	3.7	7R
10.10.10.10	L	3.4	14L
10.10.10.10	L	3.7	8L
10.10.10.10	L	3.8	15L

4/25 I	Small	3	bs	4
4/25 I	Wasp	3	gr	Lb
4/25 I	Worm	6	bs	Lb
4/25 I	Spider	10	wh	
5/23 II	Small	2	bs	
5/20 I	Orthopt	2	wh	10
4/20 II	Spider	7	gr	Lb
	Spider	3	yl	Lb
	"	2	bl	ant
	Katydid	4	gr	Lb
	Diptera	2	yl	Lb
6/17 I	Spider	3	bs	ant
5/27 I	Millipede	n	bs	Lt
3/2 III	"Worm"	9	"	Lt
5/22 II	Katydid	5	gr	Lb
4/25 III	Spider	2	bl	Lb
3/20 II	"	5	bs	Lb
3/6 I	Dipt	3	wh	Lb
4/8 II	Orthopt	25	wh	Lb
4/12 II	Spider	3	bs	Lb
4/16 I	Hemipt	4	red	Lb
4/17 I	"	3	gr	Lb
5/19 I	Spider	4	bs	Lb
4/20 I	Worm	1	yl	Lb
5/30 I				
2/1 I				

4/25 I 3-10 I

→ May - gathering in park slow

4/25 I	Small	3	bs	4
4/25 I	Wasp	3	gr	Lb
4/25 I	Worm	6	bs	Lb
4/25 I	Spider	10	wh	
5/23 II	Small	2	bs	
5/20 I	Orthopt	2	wh	10
4/20 II	Spider	7	gr	Lb
	Spider	3	yl	Lb
	"	2	bl	ant
	Katydid	4	gr	Lb
	Diptera	2	yl	Lb
6/17 I	Spider	3	bs	ant
5/27 I	Millipede	n	bs	Lt
3/2 III	"Worm"	9	"	Lt
5/22 II	Katydid	5	gr	Lb
4/25 III	Spider	2	bl	Lb
3/20 II	"	5	bs	Lb
3/6 I	Dipt	3	wh	Lb
4/8 II	Orthopt	25	wh	Lb
4/12 II	Spider	3	bs	Lb
4/16 I	Hemipt	4	red	Lb
4/17 I	"	3	gr	Lb
5/19 I	Spider	4	bs	Lb
4/20 I	Worm	1	yl	Lb
5/30 I				
2/1 I				

C

and from 1945

[illegible]

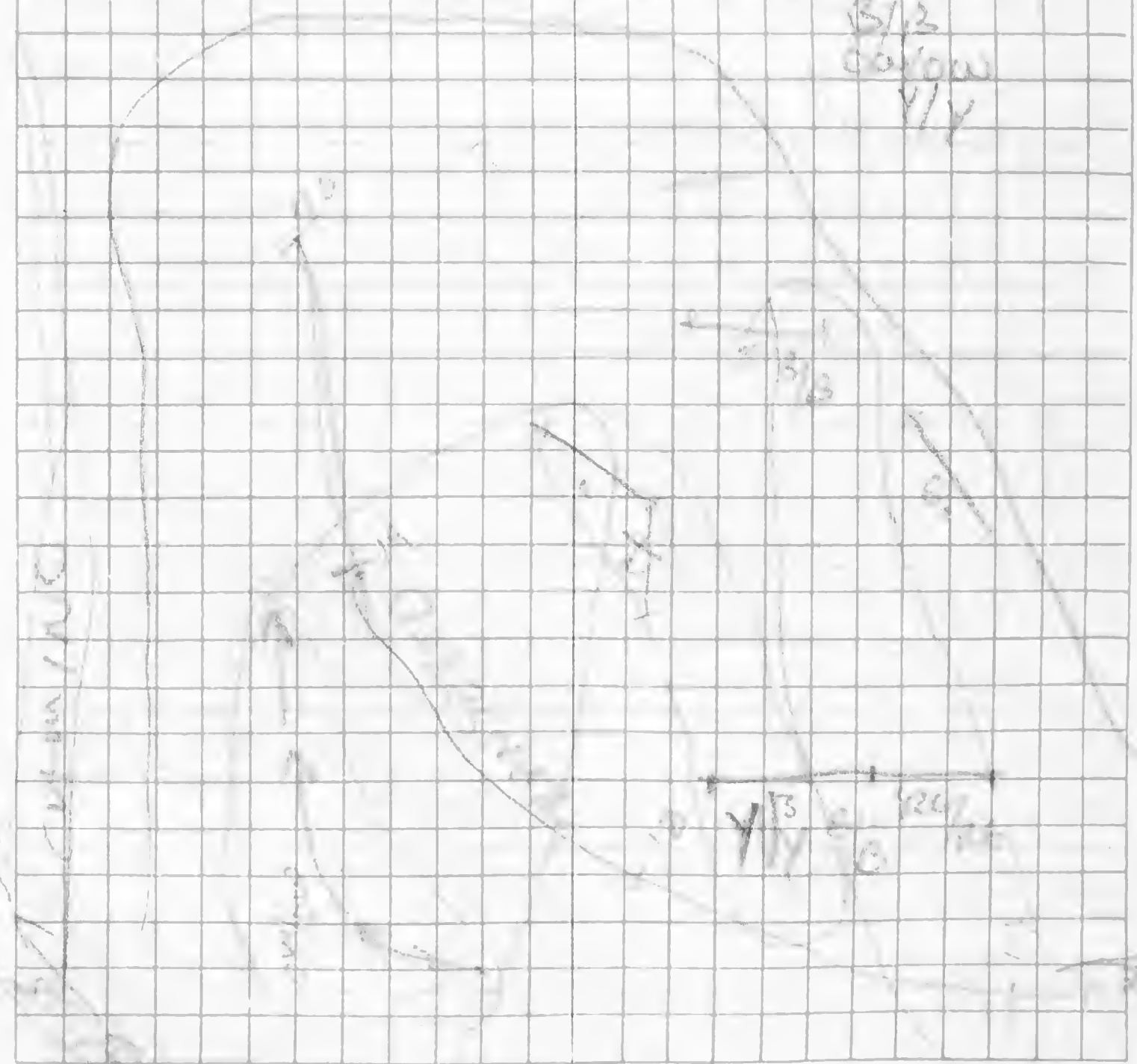
C

CyTh	8.7	13R	
No. Waterf. Thrush	91	10L	
CyTh Sh	9.6	4R	
Go. W. Thrush	9.2	12R	14/20
ZWCS	10.9	10L	
So. House Wren	10.7	17R	
Maggie's	10.9	6L	3/5
8WCS	11.5	2R	
2BRG			
CyTh	11.6	4R	
Ta. W. Thrush	11.7	5L	
Cad. h	11.6	8L	
Cad. h	11.8	6L	
2 Social Fly			
Yellow W. Thrush			
YB. G. Thrush			
Blue Fly			
2 Yell. Rump Warb.			
C. call. like a C. call.			

2 1/2	2x6	11/11/11/11	Horropt	1	ak/gr	1L
2	1x6	11/11	"	5	10/100	Stem
6x221	7m	Spider	3	blk	cur	
5x25	1	5 Collect	2	blk	bb	6+
5x20	11	Sp. cur	2	br	LL	
3x81						
4x61						

CyTh	8
Gr. Co. Fly	6
So. Thrush	1
W. Thrush	1
CSW	1
Maggie	4
YB	2
LEFL	7
Hooded	1
Redst	1
Yellow W.	2
YBFL	1
No Water	1
Yellow Rump	1
	93

Red/Red
0/0
3/2
Canyon
1/1



705-1005

705-1005

CHAS 5 FEB

Maroon h	29.9	16L	
US Emerald h	19.6	20L	
Maroon h	19.9	7L	
Maroon h	19.5	20L	
US Emerald h	19.2	7L	
US Emerald h	19.5	10L	
Maroon h	18.8	20L	
Maroon h	18.5	20L	
BC Maroon h	18.7	20L	
US Emerald h	17.8	20L	
Unknown s	17.9	15R	
Red s o r m	17.9	"	
No Royal Phys s	18.2	4L	12/25
US Emerald h	17.8	13R	
S R Phys s	17.1	2L	9/10
Greenish Emerald h	16.8	18L	
US Emerald h	16.7	17R	
US Emerald h	17.3	27L	
S R Phys h	16.1		
Unknown s	16.4	6L	
US Emerald h	16.5	2L	
US Emerald h	16.4	7L	11/4
US Emerald h	16.6	1L	9/13
US Emerald h	16.3	18R	7/10

Red s h

15.4

20L

2 US Emerald h	15.3	13R	
US Emerald h	15.2	15L	11/23
2 US Emerald h	14.3	8L	
2 US Emerald h	14.5	14L	11/25
US Emerald h	14.1	18L	11/25
2 US Emerald h	13.4	12L	
US Emerald h	13.1	18L	3/26
US Emerald h	13.5	12R	4/21
US Emerald h	13.3	7L	
US Emerald h	13.5	15L	9/14
US Emerald h	12.1	10R	
US Emerald h	12.8	20R	
US Emerald h	12.5	11L	5/11/20
US Emerald h	12.5	10L	
US Emerald h	12.1	8L	11/20
2 US Emerald h	12.6	11R	23/24
2 US Emerald h	12.7	6L	22/23
US Emerald h	12.3	19R	5/11/20
2 US Emerald h	12.2	8L	
US Emerald h	11.9	13R	6/1
US Emerald h	11.9	11L	11/25
US Emerald h	11.8	10R	
US Emerald h	11.9	6R	20/22
US Emerald h	11.1	6R	
US Emerald h	11.8	11L	
US Emerald h	11.6	15R	
US Emerald h	11.8	11R	11/21
US Emerald h	10.8	14R	
US Emerald h	10.5	5R	
US Emerald h	10.3	8R	4/2
US Emerald h	10.4	12R	
US Emerald h	10.2	10R	
US Emerald h	10.4	10R	
US Emerald h	9.8	7R	15/20
US Emerald h	9.9	11R	
US Emerald h	9.6	11R	
US Emerald h	8.5	15R	

C

Species	Length	Wing	Tail
Redstart	7.5	8R	23
Willow Warbler	1.5	10R	29
Robin	7.1	10R	
Willow Warbler	6.7	8L	20 1/2
Blk Chb	6.2	10R	
Redstart	5.4	7R	20 1/5
Willow Warbler	5.4	13R	12/22
Willow Warbler	5.3	9R	2 1/5
Robin	3.9	2L	1 1/2
Willow Warbler	2.9	20R	
Robin	3.3	14R	
Willow Warbler	2.5	16L	
Willow Warbler	2.6	12L	
Robin	2.7	16L	
Robin	2.7	7R	
Robin	1.8	5L	
Robin	2.1	16L	8 1/2
Robin	"	"	"
Robin	1.9	2L	
Robin	1.8	9L	0.5/3
Robin	1.6	8R	
Robin	1.8	14R	1/3
Robin	"	"	"
Robin	1.8	2L	1 1/2
Robin	1.2	5R	
Robin	1.3	2L	10 1/2

[illegible]

AB with plate building cost 92.52
ZUSKAS BROS. Panels Paint =

Species	Length	Wing	Tail
CYTH	12.1	7R	
Wilson's Ph	13.5	13R	1/2.5
ZWCS	11.8	5L	7/6
GB Ph	11.8	4L	7/2
" "	12.1	4R	
VB Cuckoo	11.7	5L	7/2
ZWCS	11.2	20R	
S. BRG	11.1	20R	
B. Ph	11.4	6R	
CYTH	10.1	6R	
CYTH	9.9	10L	
ZWCS	9.6	13R	
Mal Blackbird	9.6	10R	4/6
Wilson's Ph	8.6	10L	
Z. Social Ph	8.6	8L	
Mal Blackbird	8.3	12L	4/4
Z. W. Tanager	5.8	20R	7/3
→ Spotted Vireo	"	"	"
CYTH	4.5	6R	
"	"	19L	
B. Ph	3.8	12L	
Wilson's Ph	2.8	7R	
Manakin	4.3	15R	
C. Ph	1.9	8L	7/10
Wilson's Ph	1.8	8R	7/10
Mal Blackbird	1.4	20L	
ZWCS	0.9	15R	6/6

31319 0.80 2L
W. yellow 0.80 3L 1-72
Yellow 0.3 10L
L. green 0.5 4R
C. 13

Black	1
VCC	2
Yellow W	2
LEFL	1
W. ...	4
Magee y	11
	28
Orange	
Ochre	
S 1	
ind 11	
or 111	

ROCKING
Horse

Rider

23/23 Schwed. Fächer Nectar
Korrespondenz

On your coming in a brown tree,
 then each went in a group staying in a
 cluster and a few small birds flying
 out the tree. The other monkeys
 in each other. So to have much food
 is "been found". To share is common
 by which the collect only decide to
 have a tree. The basis of what
 gets communicated while in the tree?

Why don't the clay in our fire towers
get lots of bacteria? Bacteria supply
already exhausted? Need to develop
ways for defense purposes!

P.T.	M ₁	M ₂	P.H.	M ₃
2	2		1	
3	1:00 Lm stop			
5		407 Lm Lm Lm Lm Lm Lm Lm Lm Lm most & further away MULES GETS PT FLAV.		705
2				
3	245			
5	5+ Lm Lm Lm Lm 5+ Lm Lm Lm Lm Lm stop	440 5+ Lm Lm		

Pt	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																										
Pt 3	0:10	1:30	1:50	2:10	2:30	2:50	3:10	3:30	3:50	4:10	4:30	4:50	5:10	5:30	5:50	6:10	6:30	6:50	7:10	7:30	7:50	8:10	8:30	8:50	9:10	9:30	9:50	10:10	10:30	10:50	11:10	11:30	11:50	12:10	12:30	12:50	13:10	13:30	13:50	14:10	14:30	14:50	15:10	15:30	15:50	16:10	16:30	16:50	17:10	17:30	17:50	18:10	18:30	18:50	19:10	19:30	19:50	20:10	20:30	20:50	21:10	21:30	21:50	22:10	22:30	22:50	23:10	23:30	23:50	24:10	24:30	24:50	25:10	25:30	25:50	26:10	26:30	26:50	27:10	27:30	27:50	28:10	28:30	28:50	29:10	29:30	29:50	30:10	30:30	30:50	31:10	31:30	31:50	32:10	32:30	32:50	33:10	33:30	33:50	34:10	34:30	34:50	35:10	35:30	35:50	36:10	36:30	36:50	37:10	37:30	37:50	38:10	38:30	38:50	39:10	39:30	39:50	40:10	40:30	40:50	41:10	41:30	41:50	42:10	42:30	42:50	43:10	43:30	43:50	44:10	44:30	44:50	45:10	45:30	45:50	46:10	46:30	46:50	47:10	47:30	47:50	48:10	48:30	48:50	49:10	49:30	49:50	50:10	50:30	50:50	51:10	51:30	51:50	52:10	52:30	52:50	53:10	53:30	53:50	54:10	54:30	54:50	55:10	55:30	55:50	56:10	56:30	56:50	57:10	57:30	57:50	58:10	58:30	58:50	59:10	59:30	59:50	60:10	60:30	60:50	61:10	61:30	61:50	62:10	62:30	62:50	63:10	63:30	63:50	64:10	64:30	64:50	65:10	65:30	65:50	66:10	66:30	66:50	67:10	67:30	67:50	68:10	68:30	68:50	69:10	69:30	69:50	70:10	70:30	70:50	71:10	71:30	71:50	72:10	72:30	72:50	73:10	73:30	73:50	74:10	74:30	74:50	75:10	75:30	75:50	76:10	76:30	76:50	77:10	77:30	77:50	78:10	78:30	78:50	79:10	79:30	79:50	80:10	80:30	80:50	81:10	81:30	81:50	82:10	82:30	82:50	83:10	83:30	83:50	84:10	84:30	84:50	85:10	85:30	85:50	86:10	86:30	86:50	87:10	87:30	87:50	88:10	88:30	88:50	89:10	89:30	89:50	90:10	90:30	90:50	91:10	91:30	91:50	92:10	92:30	92:50	93:10	93:30	93:50	94:10	94:30	94:50	95:10	95:30	95:50	96:10	96:30	96:50	97:10	97:30	97:50	98:10	98:30	98:50	99:10	99:30	99:50	100:10	100:30	100:50

P+6 PT FLAV 808

2

3

5 HH 345
111

P7 PT MIN 822

2

13^m

5 HT 0:10
HH 555
HH 555

5 55555
555554

54 5555

54 5555

13^m

P+6 PT FLAV 335 NADA

P9 m m-PT MIN 850

2

FLV
OVER

0:07

HH 55555

5555555

5555555

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PT FLAV 905

0:10 0:10 0:10 0:10

0:05

HH 55

50m
130

15 4:05

3:10 F2

71

2970

lejos

C

C

P-4 85% 7:25
 ✓ Killdeer (1) ✓ Redstart (1) ✓
 ✓ So House Wren (1) ✓ S. Wren (1) ✓
 ✓ Clay Col Rob (1) ✓ W B Elaenia (1) ✓
 ✓ Blu Gray Tan (1) ✓ Red bill Pig (1) ✓
 No Oriole (1) ✓ Least Fly (1) ✓
 ✓ Troop King (1) ✓ Social Fly (1) ✓
 ✓ Y T Euphonia (1) ✓ Sp br Wren (1) ✓
 ✓ HT Hummingbird (1) ✓ Gr Tail Antelope (1) ✓
 ✓ Brown Ald Parrot (1) ✓ Buff Salt (1) ✓
 ✓ Br Green Fly (1) ✓ Y O Fly (1) ✓
 ✓ Chat (1) ✓
 ✓ Catbird (1) ✓
 ✓ Masked Tanager (1) ✓
 ✓ BBG (1) ✓

P-5 95% 7:50
 ✓ No Oriole (1) ✓ Red Crested Heron (1) ✓
 ✓ Y T Euphonia (1) ✓ Catbird (1) ✓
 ✓ Y T Euphonia (1) ✓ Red bill Pig (1) ✓
 ✓ Dusk Cap Fly (1) ✓ Gr Tail Antelope (1) ✓
 ✓ Buff Salt (1) ✓ Br Green Fly (1) ✓
 ✓ Chat (1) ✓
 ✓ Blk Green (1) ✓ Social Fly (1) ✓
 ✓ SUTA (1) ✓
 ✓ Bl Ch Wren (1) ✓
 ✓ L W Fly (1) ✓

P-6 95% 8:15
 ✓ Killdeer (1) ✓
 ✓ So House Wren (1) ✓
 ✓ Clay Col Rob (1) ✓
 ✓ Blu Gray Tan (1) ✓
 No Oriole (1) ✓
 ✓ Troop King (1) ✓
 ✓ Y T Euphonia (1) ✓
 ✓ HT Hummingbird (1) ✓
 ✓ Brown Ald Parrot (1) ✓
 ✓ Br Green Fly (1) ✓
 ✓ Chat (1) ✓
 ✓ Catbird (1) ✓
 ✓ Masked Tanager (1) ✓
 ✓ BBG (1) ✓

P-7 95% 8:55
 ✓ Killdeer (1) ✓
 ✓ So House Wren (1) ✓
 ✓ Clay Col Rob (1) ✓
 ✓ Blu Gray Tan (1) ✓
 No Oriole (1) ✓
 ✓ Troop King (1) ✓
 ✓ Y T Euphonia (1) ✓
 ✓ HT Hummingbird (1) ✓
 ✓ Brown Ald Parrot (1) ✓
 ✓ Br Green Fly (1) ✓
 ✓ Chat (1) ✓
 ✓ Catbird (1) ✓
 ✓ Masked Tanager (1) ✓
 ✓ BBG (1) ✓

Overcast

Chapin Point

Pt 1		770
✓ Lesser Greenlet (1)	✓ L. Tanager (1)	
✓ Hooded Warbler (1)	✓ Ash-throated (1)	
✓ YBLR (1) → 1 over	✓ Ruby Monarch (1)	
✓ Red-crowned Ant-Tan (1)	✓ O.B. Euphonia (1)	
✓ R. Hummingbird (1)	✓ D. Flycatcher (1)	
✓ Redstart (1)	✓ R.A. Tanager (1)	
✓ Mealy Parrot (1)	✓ L. Hermit (1)	
✓ Bentbill (1)	✓ Top Gnatcatcher (1)	
✓ Army Green Finch (1)	✓ Y.O. Flyc. (1)	
✓ Wedge-tail Sabrewing (1)	✓ CSW (1)	
✓ No Oriole (1)	✓ B. Gnat (1)	
✓ L.T. Hermit (1)	✓ B/G Gnatcatcher (1)	
✓ RT Hummingbird (1)	✓ WB Emerald (1)	
✓ Ruby-throated Hummer (1)	✓ L.T. Tanager (1)	
Pt 2		775
✓ Dusky Antbird (1)	✓ Wilson's (1)	
✓ YBLR (1) → 15	✓ Blue Warbler (1)	
✓ Hooded (1)	✓ R.A. Tan (1)	
✓ P.B. Warbler (1)	✓ RT Hummer (1)	
✓ W. Warbler (1)	✓ Ayala (1)	
✓ Mealy Parrot (1)	✓ BT Antbird (1)	
✓ R.A. Tanager (1)	✓ Rub. Monarch (1)	
✓ S.T. Tanager (1)	✓ L.T. Hermit (1)	
✓ W. Tanager (1)	✓ Faded Tanager (1)	
✓ L. Warbler (1)	✓ V.B. Tanager (1)	
✓ Redstart (1)	✓ L. Emerald (1)	

Properly last

T. Gnatcatcher

No Oriole (1)		
Pt 3		745
✓ YBLR (1) → 13m (1)	✓ Ayala (1)	
✓ Mealy Parrot (1)	✓ Lesser Greenlet (1)	
✓ Redstart (1)	✓ L.B. Tanager (1)	
✓ Y.O. Flyc. (1)	✓ P.B. Warbler (1)	
✓ Greenish Tanager (1)	✓ Dusk Cap. Flyc. (1)	
✓ Mayfly (1)	✓ S.T. H. Warbler (1)	
✓ Mealy Parrot (1)	✓ RTW (1)	
	✓ R. Hermit (1)	
	✓ B. Gnat (1)	
Pt 4		800
✓ Mayfly (1)	✓ Ayala (1)	
✓ Mealy Parrot (1)	✓ V. Zebra Finch (1)	
✓ YBLR (1) → 15 (1)	✓ Redstart (1)	
✓ L. Tanager (1)	✓ Brown Warbler (1)	
✓ V.B. Tanager (1)	✓ P. Green (1)	
✓ D. Flycatcher (1)	✓ Greenish Tanager (1)	
✓ P.B. Warbler (1)		
Pt 5		815
✓ Redstart (1)	✓ Lesser Greenlet (1)	
✓ Mealy Parrot (1)	✓ Ruby Monarch (1)	
✓ YBLR (1) → 15 (1)	✓ L.T. Hermit (1)	
✓ L. Tanager (1)	✓ Ayala (1)	
✓ S.T. Tanager (1)	✓ B/G Gnatcatcher (1)	
✓ V.B. Euphonia (1)	✓ Sabrewing (1)	
✓ Collared Tanager (1)	✓ Green Warbler (1)	
✓ W. Warbler (1)	✓ K. Starling (1)	
✓ D. Flycatcher (1)		
Pt 6		835
✓ L. Tanager (1)	✓ Y.O. Flyc. (1)	
✓ Lesser Greenlet (1)	✓ Mealy Parrot (1)	
✓ Redstart (1)	✓ G.C. Flyc. (1)	
✓ YBLR (1) → 15m (1)	✓ Short-billed Tanager (1)	
✓ D. Flycatcher (1)	✓ L. Tanager (1)	
✓ Collared (1)	✓ X.B. Tanager (1)	

✓ BB Fly (1) B-guy-3 ✓
 ✓ PB Woodpecker (1) B. Ch. W. Fly (1)
 ✓ Tanager (1)

P+7 830

✓ Greenish Elaenia (1) ✓ C. S. A. (1)
 ✓ Ara Macao (10) ✓ YBPL 1 m (1)
 ✓ Y. Vireo 1 ✓ B. Ch. W. Fly (1)
 ✓ BB Fly (1) ✓ Brown Gnat (1)
 ✓ Violaceous (1) ✓ B. Tanager (1)
 ✓ Dusky Cap Fly (1) ✓ RTNW 1
 ✓ Masked Tanager (1) ✓ B. W. Wren (1)
 ✓ B-guy 1 ✓ Brown Namer (1)
 ✓ Oropendula (1) ✓ Redstart (1)

P+8 905

✓ YBPL (10) L. Wren (1)
 ✓ White Namer (1) B. Ch. W. Fly (1)
 ✓ Wilson (1) SB Pigeon (1)
 ✓ Oropendula (1) ✓ Redstart (1)

P+9 925

✓ C. S. A. (1) ✓ B. C. Woodpecker (1)
 ✓ SB Pigeon (1) ✓ Brown h. Fly (1)
 ✓ YBPL (1) ✓ White Gnat (1)
 ✓ RTNW 1 ✓ Y. T. Euphonia (1)
 ✓ Oropendula 1 ✓ B. Tanager (1)

✓ Parakeet 2 (1) ✓ Wilson (1)
 ✓ Y. T. Fly (1) ✓ B. Ch. W. Fly (1)
 ✓ Y. C. Fly (1) ✓ Vireo (1)
 ✓ Brown Fly (1) ✓ Brown Fly (1)
 ✓ B. Ch. W. Fly (1) ✓ B. Ch. W. Fly (1)

P+10 940

✓ Brown h. Fly (10) ✓ Wilson (1)
 ✓ YBPL (1) ✓ B. Ch. W. Fly (1)
 ✓ Y. T. Fly (1) ✓ SB Pigeon (1)
 ✓ C. S. A. (1) ✓ Parakeet (1)
 ✓ Wilson (1) ✓ Y. T. Euphonia (1)
 ✓ Y. T. Fly (1) ✓ B. Tanager (1)
 ✓ Lesser Greenlet (1) ✓ B. Ch. W. Fly (1)
 ✓ L. Wren (1)

SECONDARY	TRIP	ST	11 FEB
Dusky Antbird sp	0.2	SL 2/4	6.45
Catbird h	0.6	SR	9.15 Overcast
Spot br. Wren h	0.7	8L	
Lesser Greenlet h	0.9	1R	19/23
Brown Ch. Fly h	0.3	17L	
W. B. Wren h	0.4	12R	
RT H. Tanager h	0.6	14R	
Y. T. Grosbeak h	1.3	7R	
2-lined Thrush h	1.2	16L 13 17L	9.25
Hooded S	1.3		
Red tail Hum h	1.3	4R 5.15	10.15
Catbird h	1.2	14L	
		19R	
Y. T. Hum h	1.2	10L 1.15	
Wilson h	1.3	15R	
Y. B. Fly h	1.7	4L 9.15	
Y. T. Fly h	2.3	17R	
2-lined Thrush h	1.3	16R	9.15
Redstart h		11R	
SB T. Tanager h	3.7	9R 11.15	
AC h	3.3	7R 5.15	
Catbird h	3.2	14L 10.15	

WBW Warbler h	3.4	15L	
Seep. Cap Phs	3.4	8R	4/15
WBW Warbler h	5.6	7L	0/10
Sulphur wing Phs	4.2	4R	2/8
2 Sp. br. Wren h	4.3	18R	0/5
VBFL h	4.3	4L	2/16
h	4.3	5R	2/14
2 Downy w			
Redstart h	4.4	11R	15/16
Red cap Man h	4.6	8R	
Downy w h	4.6	10R	0/16
Scrub h	5.1	7L	1/5
h	5.2	6R	1/6
L. Hermit s	5.7	0.0	
Hooded	4.6	16L	
Sp br Wren h	4.9	20R	
VBFL h	5.4	9L	
WB Emerald h	5.3	3R	
Brown h Ph h	6.2	5R	
2 Chachal s	7.7	2L	2/3
Leaving Melastom. Fr.			
VBFL h	7.6	16L	2/10
Le. h Ph h	8.5	6L	
Play h	8.8	19L	
2 Green Nuth	8.6	7L	
WB Emerald s	8.7	1L	

WB Warbler	9.7	8L	2/12
VBFL h	9.2	9L	10/10
Calabash	20.7	7L	1/10
CSWA h	10.3	18L	
Wing h	"	16L	
Gr. Flyc. - yellow Cat. in 20' Forest			
Is there any shrub veg in 2' Forest? Is it?			
Redstart h	10.8	8L	
WBW Warbler h	10.6	16R	
2 Brown Wren	11.1	12L	
Lesser Greenlet h	11.7	20R	
Scrub h	11.8	20R	
VBFL h			
CSWA h			
Greenish Elaenia	14.1	19R	
Redstart Phs s			
Redstart h			
VBFL h			
Lesser Greenlet h			
3 Red Tanager s	14.8	12L	
Hooded w s	14.8	5L	2/10
Redstart Phs s	"	8L	
Lesser Greenlet h	15.2	18R	
VBFL h	"	20R	
Lesser Greenlet h	"	17R	
Wing h	15.6	17R	
VBFL h	16.2	8R	
Lesser Greenlet h	16.7	15L	
Lesser Greenlet h	16.3	8R	
3 Red Tanager s	21.2	5L	
Redstart	"	5R	
VBFL h	"	5L	
Lesser Greenlet h	21.3	18R	
Lesser Greenlet h	21.7	18R	
Lesser Greenlet h	21.5	8L	
Lesser Greenlet s	21.8	8L	

WINGS IN PLACES IN PARCHED
Change from 20/11 to 20/12

Blae Gnatcatcher	14.4	10L	
LEFL h	14.8	12R	
SUTA	15.4	18L	
Sp. Warbler	15.4	5R	
Redstart	15.5	9L	6/10
Bentbill	15.6	3R	
W. Wren	15.6	19R	
Catb h	15.8	10R	
G.T. S	16.2	4R	
G.T. h	17.4	7R	
LEFL h	17.9	13L	
G.T. h	18.4	8L	
G.T. h	18.1	11L	
Wilson's	18.7	15R	1/2
WCS h	18.9	7L	
Catb	19.8	8R	
WCS h	19.3	8L	
LEFL h	19.5	4R	

Catb	6	Redstart	2
G.T.	5	Magay	1
Yellow W	3	Wren	1
Gr Gr Ph	1	Orch Owl	4
LEFL	9	SUTA	7
Ind Bunt	3		41
W. Wren	2		
W. Wren	3		

20/12/2012 FOREST 13.5R

W. Wren	0.6	11L	9/27
Magay h	0.4	20R	
W. Wren	0.4	18L	
Brown Wren	0.7	18L	25/27
W. Wren	0.6	10R	
Magay h	0.8	16L	
W. Wren	0.9	20R	
Wood Thrush	1.3	18R	
No. Key Ph	1.6	15R	20/32
Gr. C. Warbler	1.8	17L	
W. Wren	1.9	14L	20/21
Sp. Wren	1.5	8L	
Bl. Faced Antbird	2.3	11L	
3 Downy Antbird	2.4	31	
Bentbill	2.3	12R	
Pl. Wren	3.1	14L	2/12
2 R. Wren	3.4	6L	
Greened Antbird	3.4	17L	
Gr. Wren	3.5	18R	
Gr. Wren	3.7	8R	
2 W. Wren	3.7	20L	
L.T. Wren	3.8	00	
Gr. Wren	3.8	11R	1/1
Sep. Catb	3.8	7L	9/16
Gr. Wren	4.2	6L	
W. Wren	4.2	3L	
Wren	4.2	9R	
Wren	4.4	10L	
Gr. Wren	4.4	10L	
Gr. Wren	4.4	10L	
Downy Antbird	4.6	11L	
Gr. Wren	5.1	9L	3/9/20
Gr. Wren	5.3	5L	
Gr. Wren	5.2	3L	
Gr. Wren	5.3	11L	
Gr. Wren	5.3	11L	
Gr. Wren	5.3	11L	
Bl. Faced Antbird	5.9	9L	

Ward's collection more new

R. P. Tanager h	6.6	7L	4/24
Yellow Warbler h	6.5	17L	
Wood Thrush h	6.5	20L	
C. T. Tanager h	7.3	2L	
Little Heron s	7.3	00	
n n n	7.5	n	
Wood Thrush	7.6	19L	
C. T. Tanager s	7.9	00	
Wood Thrush h	8.1	3R	
Green A. Heron h	8.7	16R	
W. O. W. h	8.6	9L	
Long tail Heron h	8.8	2R-18R	
Cap. W. Heron	9.9	8L	
W. O. W. h	9.6	7L	
W. O. W. h	9.6	20L	
W. O. W. h	9.8	5L	
W. O. W. h	9.8	10L	
W. O. W. h	10.2	12R	
Lesser Greenlet h	10.2	17L	
W. O. W. h	10.1	20L	gyp
P. W. h	11.8	6R	
W. O. W. h			
Sp. W. W. h	11.3	10L	
C. W. W. h	11.7	10L	
W. O. W. h	11.9	13L	
W. O. W. h	12.2	13R	
W. O. W. h	12.2	10R	4/25

Ward's collection more new

W. O. W. h	11.5	16R	2 1/2
W. O. W. h	12.6	10R	2 1/2
W. O. W. h	12.7	15R	
W. O. W. h	12.8	3L	
W. O. W. h	12.5	3R	2 1/2
W. O. W. h	12.5	20R	
W. O. W. h	12.6	10R	2 1/2
W. O. W. h	12.9	10L	
W. O. W. h	12.8	17R	
W. O. W. h	13.1	14R	
W. O. W. h	14.1	2R	
W. O. W. h	13.6	20L	7/10
W. O. W. h	13.5	15L	
W. O. W. h	13.5	10L	
W. O. W. h	13.7	3L	4/9/1000
W. O. W. h	13.7	6L	
W. O. W. h	14.3	13L	
W. O. W. h	14.3	11L	
W. O. W. h	14.1	3L	
W. O. W. h	14.9	15L	3/10
W. O. W. h	14.9	4R	
W. O. W. h	14.9	12R	
W. O. W. h	15.1	0.0	3/2.1
W. O. W. h	15.3	3L	
W. O. W. h	15.5	7R	
W. O. W. h	15.4	4R	
W. O. W. h	15.4	12	7/9
W. O. W. h	15.7	0R	
W. O. W. h	16.2	20R	
W. O. W. h	16.2	10L	
W. O. W. h	16.2	20L	
W. O. W. h	16.9	7R	
W. O. W. h	17.2	11R	
W. O. W. h	17.6	1L	
W. O. W. h	18.4	1L	
W. O. W. h	19.1	12R	

Page 10

2-3	11	11	3
5-17	11	2 Spiders	1 gr 6
5-22	11	1 spider	1 gr 6
5-23	11	Spider	8 bl 1
5-24	11	Spider	3 y 11
4-30	11	Spider	3 bl 1
4-3	1	Wasp	5 gr 1
4-16	1	Spider	5 bl 1
5-15	1	Wasp	2 y 1
6-2	1	"	4 y 1
5-22	1	Spider	4 gr 1
6-12	1	2 Honeybees	2 bl 1
		Spider	7 gr 1
		3 wasps	2 bl 1
Sp	11	3 lb	Spider 2 bl 1
Spider	11	3 lb	Wasp 4 y 1
Kong	11	5 lb	Wasp 5 y 1

POINT	COURSE	16 FEB	92
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5-10 7 de Kudongo Sunny

Improves Forest Map	710
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1-14-68

Red colored Antlers 11 ✓ Ch.

Sw.	100	100
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222

Club	Ball	Player	(11)
171	30		

257L ①

- Transfer to marcher info for Edmund Pot. cont. counts.
- also November mapping

Location	Date	Time	Observer	Notes
727	7/27	7:27	727	
743	7/27	7:43	743	
805	8/05	8:05	805	

C

June 10

820

IV Bull Wren 1	RTA Tanager 1
OB Sparrow 1	Lesser Ant 11
VRFL (1) 1	WB Wren 1
WB Wren (1)	RT Tanager (1)
Ann (Beard) (1)	YO Fly (1)
SB Pigeon (1)	Wren (1)
RE Mot Mot (1)	M Oropendula (1)
Art Sn Vireo (1)	PB Wren (1)
L.T. Hermit 1	YW Tanager (1)
Sp. Wren (1)	Magpie 1

Summit

SCRUB POTRERO				18 FEB 640
EBLh		19.7	2R	930
Common Tody Fly h		19.9	8L	3/4
Wilson's Warbler s		19.4	"	"
WCS h		19.3	6R	
Carb h		19.8	20R	
Magpie		19.5	15L	1/2
Orch Oriole s		19.9	8L	4/1
→ 20 → 20 → 77				
Wilson's s, h		19.9	3R	1/2
3 Orch Oriole in 1's		19.4	12L	9/1
Yellow Warbler s		"	14L	5/1
Red black b s		"	"	10/1
YBC h		19.6	17L	1/2
Indigo Bunting		19.5	10R	
LEFL h		19.8	15R	

Catb h

19.2 8L 2/2

14 Th		19.5	5L	
N 6 9		19.1	3R	8-7/1
2 B. Tanager s		19.4	12L	8/1
Yellow Warbler s		18.3	20L	4/4
LEFL h		18.7	7L	
WCS h		18.2	1R	5/1
LEFL s		17.8	2R	2/5
WCS h		17.4	20R	
WCS h		17.1	16L	
LEFL h		17.2	13R	
WCS h		16.7	6R	
WCS h		17.3	7R	
Magpie s		16.3	6R	2/2.5
Quail		16.4	10L	3/3
Go in 5204 camp, banded tail, light coloration, looks up. Matted woodchuck in Costa Rica				
SP. Wren h		16.4	18L	1/2
Redstart h		16.2	18L	1/2
LEFL h		15.8	3L	2/5
RT Hummingbird s		15.9	1R	
Catb h		16.4	7L	1/6
WCS h		15.3	9L	
2 B. Tanager s		15.7	9L	
Redstart s		14.8	1R	2/2.5
LEFL h		14.9	8L	
Magpie s		14.6	4L	1/2
Catb h		15.7	8R	
WCS h		13.8	5R	
LEFL h		13.2	11R	
Magpie s		13.2	9L	1/4
WCS h		11.8	8L	
Indigo Bunting		11.6	10R	
LEFL h		11.3	4R	
Magpie s		10.8	8L	2/4
Yellow Warbler h		10.5	7R	
RT Hummingbird s		10.3	4L	3/4
Yellow Warbler s		9.4	12R	3/10
LEFL h		9.7	16L	

Gavey for Maudslayi		7.6	3R	Swag
CYTH		7.8	10R	
2 WED h		7.5	20R	
CYTH		7.1	10L	
LBFL h		6.9	20R	
"		6.8	17L	
2 CYT	S	5.5	3L	chase
WED h		5.4	7L	
WED S		4.8	8R	
So House Wren				
Overhead S		3.9	1L	1/2
CYTH		2.8	17R	
WED S		"	15R	25/3
LBFL h		2.5	6R	
WED S		1.8	1L	
Catb h		1.2	20R	
CYTH		0.8	6L	
0-1 R 10% S		L	7	
87% T			88	
3 S			5	
4L				
2x6		Spider	4	Gr 4L
3x10		Diptera	5	Gr 4L
1x4		"	4	"
4x9		Spider	5	Gr 4L
5x6		Diptera	4	Gr 4L
8x10		Spider	3	Gr 20R

1 No of trial at		1 Orch		10 m	
2x7		Spider	7	blk	4L
3x10		Spider	2	"	"
6x17		"	3	"	"
5x15		"	4	Y/Y	4L
2x8		Acorn	2	bl	stems
3x8		Spider	5	Y/Y	4L
5x10		Spider	8	W/Y	4L
5x20		Spider	5	bl	4L
1x6		2 Wren	7	W/Y	4L
2x1		Spider	4	Y/Y	4L
UPLAND FOREST 19 FEB 92					
Cloudy, warm		SHM		645-940	
Wren Robin h		19.9	18R		
ACAT h		19.2	15L		
Redstart h		19.5	13R		
VSuff h		19.6	14L		
Redstart h		19.8	7L		
GB Sparrow h		19.3	10L		
Pine h		19.2	8L		
Wren h		19.7	9R		
I WISH THE MONKEYS WOULD GO AWAY					
Lesser Greenlet h		19.9	15R	13/20	
Wren h		19.1	16R		
Wren h		19.2	17L	9/25	
YB h		18.8	15R	9/25	
Orange h		18.6	20R	5/25	
L. Acorn h		18.9	3R		
Acorn h		18.3	15L	9/25	
2 Wren h		18.3	17R	9/25	
Redstart h		16.9	11	2/25	
2 Wren h		17.3	6R	25/33	
Wilson h		17.1	8R		
Wren h		16.5	10R	6/20	
Wren h		16.8	16R	25/33	
2 Wren h		16.8	7L		
Wren h		16.5	6L	3/21	

Wh. Winged Puffins	16.3	2R	5/22
Spadell h	16.3	5L	3/22
BTR Green h	16.2	6R	
TLN Warbler h	16.2	15R	
SR Flycatcher h	15.8	6R	3/30
WFL h	15.8	2R	Gap
2 Sp. Br. Wren h	16.3	6L	
Dusky Ant h	15.8	8L	Gap
" "	16.3	11R	
3 Masked Tit h	16.1	7R	17/29
WB Wren h	15.8	3L	0-5/8/yr
3P. Antwren h	15.8	5L	6/12/yr
1 B. Antwren h	15.7	18R	
B. quail h	14.7	15R	Gap
B. Grosbeak h	14.3	7L	11/26
10 Flyc h	14.1	12R	
Catbird h	14.2	10R	2/8 Gap
Och. bell Flyc h	"	"	"
WB Emerald h	14.4	8R	Gap
SR Flyc h	13.6	1R	
B. Hd. Parrot h	13.2	11R	2/1/yr
WB B. Wren h	13.1	17R	
GR Warbler h	13.2	20L	
2 WB Wren h	12.8	3R	26/28
Swift h	12.7	5L	"
Xenopus h	12.4	6R	3/21
Bl. faced Grosbeak h	12.4	17R	11/25

Super Greenhouse Room [CART]

REBUSH	17.1	16R	3/20
1 T. Wren h	12.7	9.0	
1 W. Antwren h	11.3	10R	10/21
2 C. Wren h	10.8	18R	
WB Wren h	11.1	14R	
1 W. Wren h	11.1	14R	
GR Warbler h	10.2	19R	
2 P. Wren h	10.4	2R	13/21
1 B. Wren h	10.7	6L	10/21
1 D. Wren h	10.7	20R	Gap
2 P. Wren h	10.4	17R	
1 W. Wren h	9.7	9	
1 W. Wren h	9.6	20R	
1 W. Wren h	8.5	15L	
1 W. Wren h	8.3	7R	
1 W. Wren h	7.8	14L	
1 W. Wren h	7.7	17L	
1 W. Wren h	7.5	15L	
1 W. Wren h	6.9	7R	10/23
1 W. Wren h	6.7	16R	5/23
1 W. Wren h	5.7	9L	
1 W. Wren h	5.9	20R	
1 W. Wren h	5.5	17R	23/25
1 W. Wren h	5.2	15R	17/25
1 W. Wren h	4.9	20R	
1 W. Wren h	4.6	6R	3/18
2 W. Wren h	4.4	20L	
1 W. Wren h	4.7	18L	
1 W. Wren h	3.3	15L	18/21
1 W. Wren h	3.8	2L	17/21
1 W. Wren h	2.8	13R	12/15
1 W. Wren h	2.3	17R	
1 W. Wren h	1.7	3L	8/4/25
1 W. Wren h	1.3	7L	9/25
1 W. Wren h	0.7	14R	
1 W. Wren h	0.1	13L	
1 W. Wren h	0.2	10R	19/25
1 W. Wren h	0.2	17L	
1 W. Wren h	0.2	12R	Gap
1 W. Wren h	0.1	6R	11/25

2 Blk Hl Cataton 0.5 16R
 Buph 4 Cataton " " 14R
 VBPL 1 0.2 14R 1/4
 2 Blk-faced Lovebird 0.3 5L 12/16

4 Left
 4x26 III 3 Kangaroo 4 gr lb
 4x15 II 7 Y/g lb
 5x15 III 1 Colaptes 4 gr lb
 2x20 I 10 gr lb
 3x20 III 40 gr lb
 4x10 I 6 gr lb
 4x12 III 3 gr lb
 6x10 I 2 Dendro 3 gr lb
 3x15 I 2 Colaptes 5 gr lb
 2x7 I 2 Y/g lb
 12m
 11x15 III 3 gr lb
 12x15 III 7 gr lb
 13x15 III 5 gr lb
 14x15 III 3 gr lb
 15x15 III 12 gr lb
 16x15 III 10 gr lb

14 Right
 6x35 I 11 gr lb
 3x15 III 11 gr lb
 7x10 I 11 gr lb
 5x10 I 23 gr lb
 7x25 I 9 gr lb
 5x25 I 13 gr lb
 1x25 I 2 gr lb
 4x20 II 4 gr lb
 5x15 III 6 gr lb
 2x7 I 2 gr lb
 5x10 I 3 gr lb
 5x10 I 3 gr lb
 2x10 I 1 gr lb
 5x15 I 1 gr lb
 3x25 I 1 gr lb
 11x15 I 1 gr lb

SWA m 2 Sub March 8 to Sa Ar - 20m
 100% R+ 15

11x15 I 5
 12x15 I 5
 13x15 I 3
 14x15 I 6
 15x15 I 1
 16x15 I 1
 17x15 I 2
 18x15 I 2
 19x15 I 2

1 APRIL

630 - 453

Summa

→ 3. 8th Sales Comm.

13-14

20 Feb 68

John
B. ...

Species	Weight (g)	Wing (mm)	Tail (mm)	Notes
100% W. Antbird L	19.8	32		
3 Bl Grosbeak L	19.9	7R		
100% W. Antbird S	19.6	3R		9/12
W. S. Antbird L	19.7	7R		
100% W. Antbird S	19.6	3R		9/12
Common Collared L	19.7	11R		
100% W. Antbird L	19.5	7L		4/3/12
100% W. Antbird L	19.2	4R		
100% W. Antbird L	19.7	9R		
100% W. Antbird L	19.2	10L		
100% W. Antbird L	18.8	5R		3/
100% W. Antbird L	18.4	16R		1/2
100% W. Antbird L	17.7	18L		1/9
100% W. Antbird L	17.6	5L		1/5/9
100% W. Antbird L	17.6	10L		
100% W. Antbird L	17.3	12L		
100% W. Antbird L	17.3	20R		
4 Crested Gnatcatcher	17.5	16R		4/1
1 Chachalaca	17.5	16R		1/10
100% W. Antbird L	17.4	3L		
100% W. Antbird L	17.4	1R		
100% W. Antbird L	17.4	8R		5/9
100% W. Antbird L	17.4	10L		0/4/11
100% W. Antbird L	17.3	17R		10/11
100% W. Antbird L	16.8	10R		
2 R. W. Salt L	16.7	17R		
100% W. Antbird L	16.8	7L		5/4
100% W. Antbird L	16.7	2R		
100% W. Antbird L	16.7	7R		
100% W. Antbird L	16.6	2L		
100% W. Antbird L	16.5	5L		
100% W. Antbird L	16.5	10R		
100% W. Antbird L	16.3	8R		
100% W. Antbird L	16.3	1R		2/5/11
100% W. Antbird L	16.3	10R		
100% W. Antbird L	16.3	20R		
100% W. Antbird L	16.4	1R		
100% W. Antbird L	15.9			

C

Wilson's	16.1	9L	Diff
YB Cuckoo h	15.8	10L	
Greenish h	15.7	4L	0 2/3
Wilson's sparrow	15.4	10R	10/10
Redstart s	15.3	12L	0/8 Cocr
BTW sparrow	14.8	9L	8/10 Cocr
Hooded h	15.1	6L	0/3/8
Wilson's s	14.9	2R	9/10 Cocr
2 Blk Hd Salt h	14.4	18L	
GB Sparrow	14.6	10R	
Mangy h	14.5	3R	
YF Euphonia h	14.5	20R	
SW Tody Phc h		9R	
R-B Cuckoo h	14.3	5L	
YF Oriole h	14.3	20L	
Wilson's h	14.3	5L	1/3
B goat h	14.3	8L	7/8
2 Salt h	14.2	10R	
Blk Grackles	14.1	11L	
BTW s	13.8	20L	20/30
L Hermit s	13.9	0.0	
YF Ch. sparrow			
US sparrow h	13.4	3R	3/12
Wilson's h	12.9	5L	
2 Blk Hd Salt h	11.6	14L	14/20
Wilson's h	11.2	10L	
Wilson's h	10.5	17R	17/20

Wilson's	10.5	4R	9/10
2 YF Cuckoo h	10.1	9R	
Wilson's h	10.4	1R	8/9 Cocr
Wilson's h	10.2	1R	Cocr
R-B Sparrow h	10.1	2R	
Wilson's h	10.1	20R	7/10 Cocr
Wilson's h	9.9	1R	
BTW Salt h	9.5	6R	8/10
SW Salt h	8.4	6L	5/10
B goat h	4	4	6/7
Greenish Cuckoo s	8.9	1	7/10
YF Oriole h	8.2	7R	
PR Salt h	8.4	20R	10/10 Cocr
Wilson's s	8.9	13L	
C Salt h	8.3	13L	
Wilson's h	8.7	17L	0/2
SW Tody Phc h	8.4	3R	0/2
BTW h	8.6	6R	
YF Oriole h	8.2	16L	Cocr
R-B Salt h	8.3	15L	9/23
Wilson's h	8.7	12L	5/16
Wilson's s	8.6	11L	1/10 Cocr
Wilson's h	8.6	11L	1/10 Cocr
Wilson's h	7.9	11L	3/8
Wilson's h	7.3	9R	3/8
Wilson's h	7.2	8R	
Wilson's h	7.3	16L	
Wilson's h	6.8	2L	7/9
Wilson's h	6.5	15R	
Wilson's h	6.9	17L	
Wilson's h	6.8	6R	
Wilson's h	5.8	3L	
Wilson's h	5.4	19L	35/20
Wilson's h	4.5	12R	9/10
Wilson's h	4.5	12R	16/20
Wilson's h	4.3	10R	
Wilson's h	4.3	10R	
Wilson's h	4.1	2L	3/5
Wilson's h	3.3	4R	

RB Spectail h	41	10R
2 Dusk. Ant h	"	12
Mary 2	3.9	10L 10/20
Tammy Wm Wreap S	3.8	9L 3/20
L. Humint 3	3.9	7L
Nelsons 3	3.4	6L 9/20
2 Dusk. Wm h	2.9	20R
Wm Polk h	2.6	7L 7/20
Super Cap Fly h	2.8	8L
O. Wm h	2.6	10R 05/20
B. Antelope	2.6	13R
L. Humint S	"	10R
Str h	"	"
GD Sparrow h	2.4	9L
Red h	2.4	15R
B/G. Gnatcatcher h	"	"
Nelson h	2.4	4L
Dusk. Capped Fly h	7.7	9R 9/11
2 Crowned Cat Tan 50	0.2	2R 7/5
CSA S	0.1	10 19/20
GB Sparrow h	0.2	6L 05/11
B. Antelope	0.3	16L 1/3
Y. T. Euphonia h	0.1	10L 20/20

Wilson	17
Redstart	6
Wendray	3
LEFL	1
O. Wm h	3
WOT	1
Ala. h	4
BT h	2
Wood	1
Wendray	1
CSA	3
SWA	1

EMPID. PEABACKS 21 RATS
FLAV. HABITAT ADJ. TO STATION
OUPONEN 1 P.M. MIN
P₁ P₂ P₃ 652

2.10 2.55 5.5

3.4 2.50
10/15/15

5.4 5.55 5.55 5.55

P₁ P₂ P₃ P₄ 706

2.5

3.4 10/15

10/15

C

PT 3	PT MIN	720
2	55555555	
	55	
3	553	
	5	
	17m	
5	1115555555	
	55555553	
	555555	

PT 4	P.T	PLAY	735
2			
3			
5	5:15	7:15	
	18m	35m	

P-5	PT MIN	780
2		
3	2:35	
5		
	P-6	PT PLAY 783
2	555555	
	535555	
	55	

3	55555	55555	0:15
	55555552		
	When F2 started	555555	
	10:10		
5	5555	10:10	55
	5+		
	7m	13/50	
	P-7	2:10m	8:18
2	51055	5:11m	
		16m	7/26
	11:10	23:5	2:55

response to chip coll g Nim?

Pt 8

Pt. 77AV

832

2 5 10 10 10 10

3 5 10 15 15 10

5

55

245

104

18m

7/20

Pt 9

Pt Min

RAIN

846

28 FEB 1971

2

5 10 10

1120

St.

5 15 5

5100

L

20 35

20

m. 11/20/71

Pt 10

Pt PLAN

839

2

3 10 10 048
10 10 10 10
10 1

5 5 5 5 1030

5 10 10 10 10
10 10 10 5
5 5 5

10 5 5 5 5
5 5 1

25m

Pt. 1 Shale Murchon

Pt 7 Forest

1098 8 - " "

Flag 9 - 150m upstream on right bank

10 - " "

11 - " "

12 - " "

Pt 16 Sand Murchon - 150 upstream

17 - " "

18 - " "

13 Forest Murchon " "

14 Sand Murchon 150m upstream

20 - " "

Pt 10 1015 1015 1015 1015

21 FEB

Pt. 2 Shale Murchon / 1015 635

1015 1015 1015 1015

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1015 1015 1015 1015

656

[illegible]

710

[illegible]

3	3	3
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1. <i>Ag. Yungipicus</i> (1) 2. <i>Ag. P. L. L.</i> (1) 3. <i>Ag. P. L. L.</i> (1) 4. <i>Ag. P. L. L.</i> (1) 5. <i>Ag. P. L. L.</i> (1) 6. <i>Ag. P. L. L.</i> (1) 7. <i>Ag. P. L. L.</i> (1) 8. <i>Ag. P. L. L.</i> (1) 9. <i>Ag. P. L. L.</i> (1) 10. <i>Ag. P. L. L.</i> (1)	11. <i>Ag. P. L. L.</i> (1) 12. <i>Ag. P. L. L.</i> (1) 13. <i>Ag. P. L. L.</i> (1) 14. <i>Ag. P. L. L.</i> (1) 15. <i>Ag. P. L. L.</i> (1) 16. <i>Ag. P. L. L.</i> (1) 17. <i>Ag. P. L. L.</i> (1) 18. <i>Ag. P. L. L.</i> (1) 19. <i>Ag. P. L. L.</i> (1) 20. <i>Ag. P. L. L.</i> (1)
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Scrub Manzanita Pt 16 902
 Wils Wren 1 M. Woodpecker (1)
 Red Tan (1) GR Sparrow (1)
 Sp. Wren (1) SR Tanager
 WBL 1 WBL 1
 L. Gnatcatcher 1

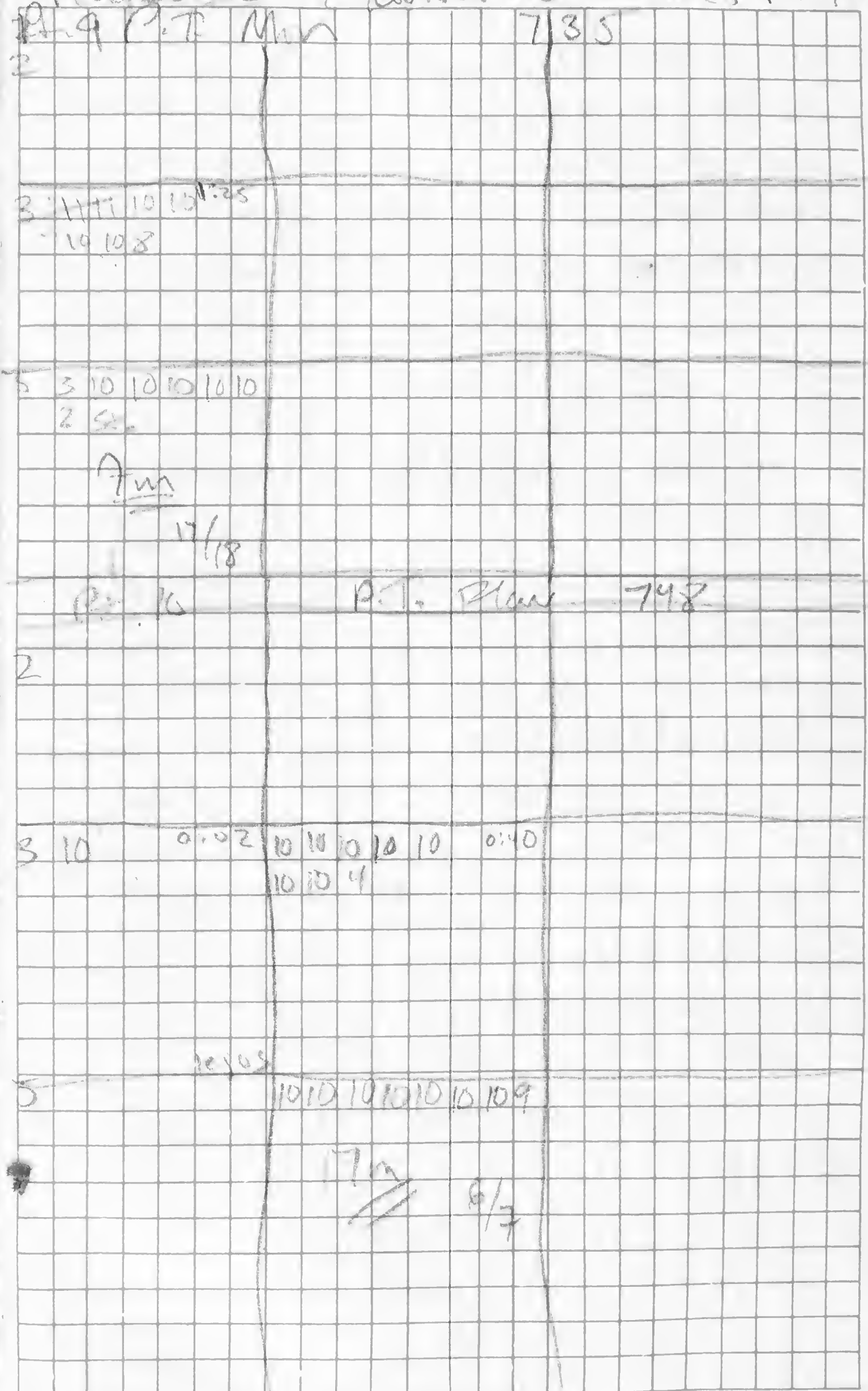
Pt 12 Bosque Manzanita 909
 Wils Wren 1 Cal. Elaenia (1)
 Red-capped Manakin (1) Bushy Warbler (1)
 Yellow-billed Cuckoo (1) Tanager (1)
 Social Fly (1) B. L. Warbler (1)
 Mexican Goldfinch 1 L. Gnatcatcher 1
 Purple-throated Tyrant (1) L. Tanager (1)
 Lesser Greenlet (1) WBL (1)
 S. L. Woodpecker (1)

Scrub Manzanita Pt 17 929
 Red-capped A. Tan (1) Red-capped C. (1)
 Lesser Greenlet 1 Wilson's (1)
 SR Tan 1 WBL (1)
 46 WBL 1 Cal. Tan 1
 Sp. Wren (1) Green Warbler 1
 W. Bluebird 1

23 Feb

Bosque 20

Playbackes Flaviventris (row'd) Pt 9+10



WFL	95			
Bluebreast	49	812		10/1
Card	57	12R		10/1
Parula	94	91		
Cat	96	18L		
WR Emerald	91	15R		10/1
Ch. W. Robin	9	10L		
W. Fly	92	15L		
W. Fly	91	9L		1/5
May Wren	91	2R		1/2
Br. Siskin	89	5L		6/13
2. B. Siskin	91	12L		8/12
Y. Wren	91	1L		4/5
W. Fly	91	12L		4/13
Sc. Wren	92	20R		
W. T. Wren	9	19R		
W. T. Wren	9	20R		
W. T. Wren	91	1L	Strong	
WFL	87	2R		
W. Wren	88	7L		10/1
3. W. Wren	88	7L		10/1
3. W. Wren	89	8L		
W. Wren	88	7L		10/1
Cat	77	9R		
2. W. B. Wren	77	14L		9/15
3. W. B. Wren	79	11R		
W. Wren	71	3L		

WFL	68	2R		
WFL	68	6L		
WFL	65	20R		
WFL	65	16L		
WFL	65	3R		9/15
WFL	65	20R		
WFL	65	5L		1/5
WFL	65	7L		1/5
WFL	65	20L		3/1
WFL	65	5R		1/5
WFL	65	3L		0/5
WFL	65	6R		1/5
WFL	65	6R		1/5
WFL	65	3R		8/1
WFL	65	4R		2/5
WFL	65	8L		1/4
WFL	65	20R		
WFL	65	16R		
WFL	65	5L		9/5
WFL	65	15R		3/3
WFL	65	20R		
WFL	65	4R		9/9
WFL	65	13L		
WFL	65	3L		
WFL	65	11L		
WFL	65	7R		
WFL	65	2L		1/5
WFL	65	10L		
WFL	65	8R		0/7
WFL	65	2R		1/6
WFL	65	4R		20/1
WFL	65	0R		15/10
WFL	65	17L		9/16
WFL	65	10R		
WFL	65	14L		9/7
WFL	65	7L		
WFL	65	10R		
WFL	65	14R		
WFL	65	17L		

Redstart Th	6.1	8R	9/10
YBPL h	7.2		
2 Mealy Parrot	6.5	8R	14/14
Redstart Th	7.3	16L	17/22
VO Flyc h	7.2	0.0	18/25
YBPL h	8.5	7R	18/20
Toucan S	9.3	8L	10/12
2 Br Jay S	9.1	5R	10/17
BB Woodhewer h	9.3	15L	
Dusky Parula h	9.3	20R	
RT Wren h	9.5	9R	
YBPL	10.9	9	11L
3 HT A Tanager h	10.6	5R	
Redstart Th	9.8	17R	
2 Troop King h	10.8	0.0	12/12
WOTAS	11.1	4R	9/10 ^{entry}
2 Masked Tanager h	"	"	" "
VO FL h	10.9	9R	
Blk chnapter S	11.7	4R	9/10
Sooty warb	"	"	" "
Redstart Th			
Maggi o	11.7	6R	8/10
Sepia Eae			
W bill wren			
2 Red the Ants Tan	11.8	13R	
Lesser Greenlet h	11.9	17R	
WB Emerald S	11.5	13L	10/16

Arreola L	14.7	18L	
Tacoma h	15.2	17L	
Thrush h	15.5	17L	
Whermit S	15.7	8R	16R
Soc hd wren	15.6	13L	
Chiracush S	15.8	14R	19/23
YB Sparrow	15.8	17R	9/14
YB Sparrow	15.8	17R	1/4
Downy Woodpecker	15.9	3R	3/29
YB Sparrow h	16.2	15R	0/1
Wren S	16.4	20L	
YBPL h	16.6	18L	
Nowhere S	17.2	18L	19/23
2 B. wrens	17.8	7L	20/21
YBPL S	17.7	2L	16/19
Redstart S	17.9	15L	
Lesser Greenlet h	17.8	10L	
VO Fly h	18.1	15L	
RT Wren h	19.7	10L	
Wilson S			
LE FL	2		
YBPL	1		
WOTAS	3		
WOTAS	7		
WOTAS	1		
WOTAS	1		
WOTAS	3		
WOTAS	4		
WOTAS	1		
YBPL	4		
	30		

440 923

MILPA 28 FEB 92 Cloudy			
Yellow Warbler h	0.5	SL	3/3
Greenish Elaenia h	0.5	WR	
Yellow Warbler h	0.1	3L	2/3
Social Flyc	0.3	2R	5/6
WB Elaenia h	0.8	WR	
Variable Seedeater	0.8	10L	4/5
Gr h	1.1	4L	
W. Wren h	0.9	6R	1/2
Social Flyc	0.9	16R	
Red-bellied h	0.9	6R	Chase
10 BBG h, s	2.1	2L	0.5/1.5
LEFL h	2.3	19R	
Scarlet Rump h	2.2	20L	4/3
Gr h	2.5	6L	1/2
LEFL h	2.9	4L	
Mel Blackbird h	3.3	8R	3/3
WCS h	3.2	20L	2/2
Wilson's h	3.5	SL	
C h	3.6	7L	
3 Social Flyc	4.2	8R	5/6
7 Banded Antshrike	5.8	5R	1/2
Yellow Warbler h	4.2	8R	5/3
Sc Rump Tan h	3.9	10L	4/3
WCS h	4.6	18R	
Wilson's h	4.2	8R	3/3
GB Sparrow h	4.6	18L	7/3

20 in border

WCS h	5.1	12R	
Mel Blackbird	7.2	20R	3/3
Yellow Warbler	6.7	20R	8/3
W. Wren	7.2	20R	1/2
Yellow Warbler h	8.1	5R	0.5/1
C h	8.1		
BBG h	8.5	18R	1/5
W. Wren	7.9	13L	3/45
W. Wren	8.2	9R	
Ph h Seed Eater	8.2	9R	1/1
WCS h	8.2	8R	
Variable Seed	8.2	14R	2/4
Social Flyc	8.2	14R	
WB Elaenia h	8.9	14L	1/1
C h	9.4	7R	
2 Grayish Salt h	10.5	20R	1/2
Brown Jay	"	"	1/2
Clay Col. Robin	10.7	"	5/3
Variable Seed	"	"	
WCS h	10.9	20R	
WCS h	11.0	14L	
WCS h	11.4	10L	
C h	11.6	10R	
ORE h	11.8	15R	
W. Wren	11.6	19R	2/2
W. Wren	"	"	
W. Wren	"	"	
2 Sc Rump Tan	11.6	10R	
2 Brown W. Ants	11.9	15L	
Sc Rump Tan	12.7	9R	
Wilson's Warbler h	12.3	12R	
Yellow Warbler h	12.3	5R	
W. Wren	12.7	12R	4/3
2 BBG	13.5	12R	
Wilson's Warbler h	13.5	3L	
C h	14.2	6L	
WCS h	14.5	14R	
WCS h	14.6	14R	

WCS	117	112	
2 GB Am s	105	5R	3/3
BBG h	155	10L	
2 Ruddy Ground Dove	158	20R	9/6
LEPL h	159	7R	
5 WCS s	164	6L	
2 BBG s	"	"	
House Wren s	167	18L	3/3
W.T. s	175	6R	
Yellow W. s	175	14L	4/3
2 Catbirds	179	5L	
Thick-billed Woodpecker	175	3L	
LEPL h	174	19L	Chickadee
Catbird s	176	11L	
1 BBG s	"	14L	
Ruddy Ground Dove s	174	9L	
Manys s	174	18L	
Brown Cr. Flyc s	174	18L	16/22
Common Towhee	175	8R	
3 Blue Grosbeak s	181	9L	1/1
BBG h	183	11L	
2 Ind. Bunting h	184	15L	
LEPL h	187	10L	
Catbird s	192	17L	2/3
LEPL h	195	11R	

[illegible]

2 Red C. Ant. Tern	11.6	20L	
BR E. W. W. Fl. b. h.	16.6	9L	11/3
W. B. P. L. h.	15.5	8L	
2 W. W. S.	15.2	3R	SP. 1/2
W. B. P. L. h.	14.9	4R	1/11
Red. h. h.	11.7	15L	12/23
Red. h. h. P. h. S.	11.5	18L	4/20
Red. h. h.	13.8	7L	2/25
M. h. h.	15.7	20L	
T. h. h. W. S.	13.3	2L	6/12
R. P. h. h.	12.6	15R	
B. E. h. h.	12.2	11L	2/12
W. h. h.	11.6	7R	4/10
2 C. h. S.	11.8	10R	
M. h. h.	11.8	11L	
L. h. h. S.	11.6	7R	
M. h. h.	11.4	10R	
W. h. h.	11.8	5R	10/10
W. h. h.	10.7	10R	
L. Green. h.	11.2	18R	
Sl. tail T. h.	10.4	9R	1/4
C. h. h.	"	"	1/5
M. h. h.	10.1	16L	
W. h. h. S.	10.1	14L	3/10
W. h. h.	"	"	
Chase near Fr. h. h.			
M. h. h.	10.1	4R	

Indications are weak
8 W. h. h. of transect
worth noting

W. h. h.	8.5	15L	
C. h. h.	8.5	15L	
W. h. h.	7.7	17R	
C. h. h.	7.3	16L	
W. h. h.	7.3	20R	
W. h. h.	6.9	2L	
W. h. h.	6.3	8R	
W. h. h.	5.8	13R	
W. h. h.	5.8	3R	6/10
W. h. h.	5.4	13L	
W. h. h.	5.2	4R	
W. h. h.	4.5	10R	
W. h. h.	3.7	2R	
W. h. h.	3.5	6L	
W. h. h.	2.9	2L	2/25
W. h. h.	2.8	8L	
W. h. h.	2.7	9R	
W. h. h.	2.5	16R	
W. h. h.	2.5	10L	15/22
W. h. h.	2.2	10R	
W. h. h.	2.2	20R	
W. h. h.	2.3	16R	
W. h. h.	1.9	9R	
W. h. h.	1.5	17R	
W. h. h.	1.2		
W. h. h.			
W. h. h.			
W. h. h.	1.3	10R	
W. h. h.	1.3	11L	1/5
W. h. h.			
W. h. h.	1.2	2L	20/22
W. h. h.	1.2	15L	
W. h. h.	1.3	11R	1/10
W. h. h.	1.1	7L	
W. h. h.	0.9	5L	10/10

Transverse bags from 28 APR

Bags 6 left 19M

3412 II	Spider	4	1
4412 II	"	3	1
5120 I	Lepidoptera	1	1
247 I	Spider	10	3
248 I	Neuropt	3	1
5115 III	Coleopt	2	1
144 III	Tullech	1	3
3415 I	Neuropt	3	1
3410 III	Spider	13	1
5417 I			
2412 I			
3419 II			

162	Neuropt	3	1
3413 II	Dipt	5	1
144 I	2 Neuropt	3	1
245 I	"	3	1
246 II	Lepidoptera	12	1
5120 I	Spider	5	1
6412 I	Coleb	5	
3417 III	YBFL	8	
5115 I	Bowu	1	
1434 III	Gr. G Fly	2	
4413 II	WOTH	9	
	Redox	3	
	M...	4	
	EST...	4	
	S...	1	

Sum

6 N. AREA EDS 10-2000 69

1412 I	10.7	10.2	350
4412 I	19.5	15.2	
4412 I	19.2	41	
2412 I	18.7	10.2	
4412 I	18.2	11.1	
4412 I	18.7	9.1	
4412 I	17.6	1.2	1/3
4412 I	19.2	16.1	
4412 I	18.7	10.1	
4412 I	18.3	13.1	
4412 I	17.5	15.1	
4412 I	17.5	7.2	
4412 I	16.7	1.2	4/5
2412 I	16.7	1.2	4/5
4412 I	17.5	17.1	4/7
4412 I	16.5	15.1	
4412 I	15.6	7.1	8/9
4412 I	15.6	14.1	
4412 I	14.3	6.1	
4412 I	15.1	3.1	
4412 I	16.1	20.1	
4412 I	14.8	14.1	
4412 I	14.3	1.1	2/25
4412 I	15.5	1.1	
4412 I	15.3	7.1	
4412 I	15.2	1.1	
4412 I	14.3	6.1	22/25
4412 I	14.9	3.1	
4412 I	14.3	6.1	7/25
4412 I	11.5	13.1	
4412 I	13.5	20.1	4/25
4412 I	13.5	1.1	
4412 I	17.1	10.1	
4412 I	13.5	2.1	
4412 I	13.5	2.1	

C

McDonalds	12.8	10.1
B. G. Fly	14.3	6L 13/10
Chick	13.5	17L
LBFL h	13.3	19L 2/1
Trop King	12.6	5R 10/10
3 Sc Pump	12.4	10L 5/9
Chick	12.2	2L 1/1
Texas Warbler	11.1	14R 3/10
B. quail		19
Ed. King	10.9	12R 11/2
3 Chick	10.6	4R 5/10
Ed. King	10.6	8L
LBFL h	10.7	
Rocky Chick	11.8	7L
2 Thick bill	11.2	5L
Yellow Warbler	11.1	18R 14/5
M. Blackbird		
T. Kingbird		
Greenish Elaenia	10.8	20R 7/10
Ed. King	10.5	9R
LBFL s	10.1	7R 5/10
Trop. Pewee	10.5	10R 7/10
Sc Pump	10.5	8L
2 B. G.		
Mel B. G.	10.4	15R
2 Chick	8.9	8R 3/10
LBFL h		10/10

4 Trop King in 2 in 2 Cocks?
the both song

2 Trop King	8.2	3R
Ed. King	8.6	12R 10/10
B. G. Fly		
LBFL h	7.4	12R 1/10
Rocky Chick	7.2	1/10
Yellow Warbler	6.5	2R
Ed. King	4.8	10/10
4 Trop King	5.1	4R
Ed. King		
Ed. King	2.8	14/1
Ed. King	1.6	20R
Ed. King	1.1	3R 5/15
Ed. King	0.8	10R
Ed. King	0.1	10L 15/1

McDonalds 10/10
Ed. King 4/5

6) Rose Kestrel. Breeds - some as above
or in 10/10

LBFL	13
CYT	4
Ed. King	4
Rocky	1
Blue King	1
Chick	5
Wilson	1
Chick	10
Yellow War	4
Chick	1
Ed. King	1
Ed. King	1
Ed. King	1

Russian Forest 6/1/1968

26 L Warbler	h	19.9	14L	7/12
Sul fur rump Flyc	s	19.8	7R	7/12
Long tail Hermit	W	19.8	14L	
2 Buff thr Red Gln	h	18.7	6L	
2 Yellow Warbler	h	18.5	7L	
20 Striped Ant Wren	h	18.7	12R	
Hummer	h	18.4	6R	7/9
N. Waterthrush	h	18.6	7L	
Chert Colored Warbler	s	18.3	3R	7/13
2 G C Warbler	h	18.3	4L	
O B Sparrow	h	18.4	17L	
3 B F Grosbeak	h	18.1	14R	
Spot h Wren	h	17.8	18R	
O B Sparrow	s	17.9	8R	
Red M A Tanager	h	17.4	20L	
B B Grosbeak	h	16.7	18L	
h C Magpie	h	16.9	11L	
2 Sp pr Wren	h	16.6	15R	
B T Shaw Tan	h	16.2	6R	
Redstart	h	16.3	17L	10/1
2 G C Warb	h	16.2	6L	
2 B C A Tanager	h	16.1	2L	
B F Grosbeak	h	15.8	19R	
Bankbill	h	15.8	12L	
Dusky Heron	h	15.4	16L	
- where are they all?				

B. quail	h	15.5	14R	
W. Wren	h	15.3	15L	
W. Wren	h	15.3	16R	
N. Yellow Warbler	h	14.9	18R	
T. Hermit	h	14.5	20R	
P. Wren	h	14.9	20R	
S. Wren	h	14.8	20R	
Redstart	h	14.2	4L	17/30
L. Greenlet	h	14.1	6L	
Y. Euphonia	h	14.1	10R	
P. Wren	h	13.9	14R	
D. Wren	h	13.8	6L	
W. Wren	h	13.8	14R	
W. Wren	h	13.7	13R	13/25
S. Wren	h	12.3	14R	
Long tail Hermit	h	11.7	8L	
Sp. Wren	h	11.8	7L	
L. Greenlet	h	11.7	8L	
2 D. Wren	h	11.7	11R	
2 B. Wren	h	11.5	18L	
R. T. Wren	h	11.3	7L	
W. Wren	h	11.3	7L	
L. Wren	s	11.2	1R	
W. Wren	h	10.7	17L	9/20
K. Wren	h	10.5	4L	10/20
Long tail Hermit	s	9.8	2R	
2 W. Wren	h	9.8	6L	
W. Wren	h	10.1	20R	
B. Wren	h	9.3	15L	
2 B. Wren	h	9.1	10R	
L. Wren	h	8.8	4R	
2 D. Wren	h	8.8	2L	
W. Wren	h	8.5	14L	
W. Wren	s	7.6	8R	
Long tail Hermit	s	7.9	3L	
G. Wren	h	7.1	10R	
R. Wren	h	6.9	9R	17/20
G. Wren	h	6.8	16L	14/20
W. Wren	h	5.9	16R	
L. Wren	s	5.8	6L	

14 Mar Over 0.1 41 71 76
No of 2 " " " "

[illegible]

2 birds side of road

Pt 24 850 35%

Wilson's	111	Red start	
Vol Trogon		Pt Hum	
LEFL		Yellow	10/10 (1)
Aquila	(1)	Red arch	
CWT	1	RC Cooper	
Bay Jay	(1)	Nuthatch	(1)
GO	11/20	GR Sparrow	1
WCS	1		

Pt 25 904 30%

WCS	10	D. C. Flyc	1
GT Gnatcatcher	(1)	M Blackbird	(1)
LEFL	1	Orn. Oriole	
Violaceous Trogon	(1)	Yellow Warb	1
BRG	(1)	B. G. Fly	1
S. D. Gnatcatcher	(1)	B. Ash-thr	(1)
Social Fly	(1)	Hummer	1

Pt 26 920 35%

Yellow Warb	1	Vol Trogon	(1)
LEFL	1	Coll. Fly	(1)
Nuthatch	(1)	M Blackbird	(1)
GR Gnatcatcher	(1)	X. G. Flycatcher	(1)
GT Gnatcatcher	(1)	Wilson's	1
Hummer	1	Yellow	1
WCS	(1)	Pt Hum	(1)
WCS	(1)		

TABLA I

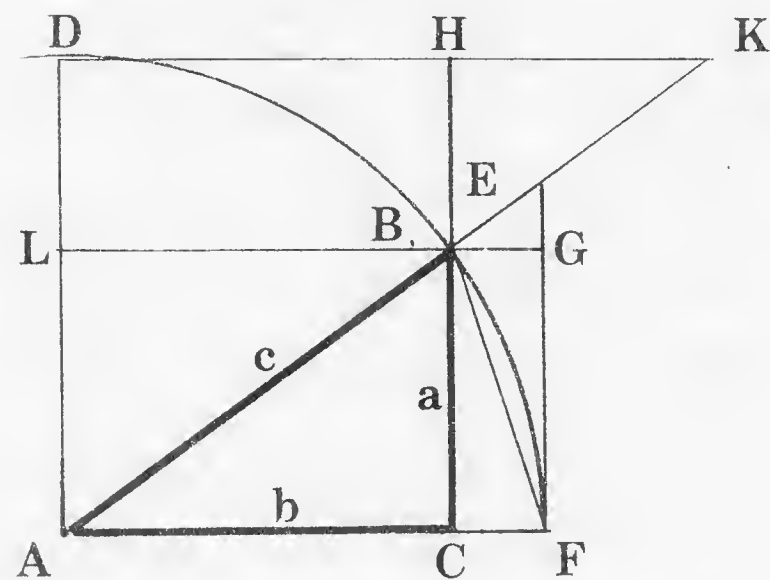
Fórmulas Trigonométricas

FUNCIONES TRIGONOMETRICAS

Sea el ángulo BAC (Fig. 1) = A = arco BF, y el radio AB = AF = AD = 1.

Entonces:

sen	A = BC
cos	A = AC
tg	A = FE
cot	A = DK
sec	A = AE
cosec	A = AK
senver	A = CF
cosvers	A = LD
exsec	A = BE
coexsec	A = BK
cuerda	A = BF



(En el triángulo recto) ABC (Fig. 1), sea el ángulo BAC = A, ABC y ACB = C = 90°. Haga el lado BC = a, AC = b y AB = c.

Entonces tenemos que:

$$1.-\text{sen} \quad A = \frac{a}{c} = \cos \quad B$$

$$2.-\text{sen} \quad B = \frac{b}{c} = \cos \quad A$$

$$3.-\text{tg} \quad A = \frac{a}{b} = \cot \quad B$$

$$4.-\text{tg} \quad B = \frac{b}{a} = \cot \quad A$$

$$5.-\text{sec} \quad A = \frac{c}{b} = \text{cosec} \quad B$$

$$6.-\text{sec} \quad B = \frac{c}{a} = \text{cosec} \quad A$$

$$7.-\text{senver} \quad A = \frac{c-b}{c} = \text{cosver} \quad B$$

$$8.-\text{senver} \quad B = \frac{c-a}{c} = \text{cosver} \quad A$$

$$9.-\text{exsec} \quad A = \frac{c-b}{b} = \text{coexsec} \quad B$$

$$10.-\text{exsec} \quad B = \frac{c-a}{a} = \text{coexsec} \quad A$$

$$11.-a = c \text{ sen} A = c \cos B \\ = b \text{ tg} A = b \cot B$$

$$= \sqrt{c^2 - b^2} \\ = \sqrt{(c + b)(c - b)}$$

$$12.-b = c \cos A = c \text{ sen} B \\ = a \cot A = a \text{ tg} B$$

$$= \sqrt{(c + a)(c - a)}$$

$$13.-c = \frac{a}{\text{sen} A} = \frac{a}{\cos B}$$

$$= \frac{b}{\cos A} = \frac{b}{\text{sen} B}$$

$$= \sqrt{a^2 + b^2}$$

TABLA I

Fórmulas Trigonométricas

$$14. \text{sen} A = \frac{1}{\text{cosec} A} = \text{tg} A \cos A; \therefore \cos A = \frac{1}{\text{sec} A} = \cot A \text{sen} A$$

$$15. \text{tg} A = \frac{\text{sen} A}{\cos A} = \frac{1}{\cot A}; \therefore \cot A = \frac{\cos A}{\text{sen} A} = \frac{1}{\text{tg} A}$$

$$16. \text{senver} A = 1 - \cos A = \text{sen} A \text{tg} \frac{1}{2} A = 2 \text{sen}^2 \left(\frac{1}{2} A \right)$$

$$17. \text{sec} A = \frac{1}{\cos A} = \sqrt{1 + \text{tg}^2 A}; \therefore \text{cosec} A = \frac{1}{\text{sen} A} = \sqrt{1 + \cot^2 A}$$

$$18. \text{exsec} A = \text{sec} A - 1 = \text{tg} A \text{tg} \frac{1}{2} A = \frac{\text{senver} A}{\cos A}$$

FORMULAS DE LA CURVA

Caso 1. Cuando D representa el ángulo correspondiente a una cuerda de 20 m.

$$19. R = \frac{10}{\text{sen}(D/2)}; \therefore \text{sen}(D/2) = \frac{10}{R}$$

Caso 2. Cuando D representa el ángulo correspondiente a dos cuerdas consecutivas de 10 m cada una.

$$20. R = \frac{5}{\text{sen}(D/4)}; \therefore \text{sen}(D/4) = \frac{5}{R}$$

$$21. \text{Longitud de la curva} \quad L = 20 \frac{1}{D} \quad (\text{para } R \gg 100 \text{ mts})$$

$$22. \text{Angulo intersectado} \quad I = \frac{DL}{20}$$

$$23. \text{Grado de la curva} \quad D = 20 \frac{1}{L}$$

$$24. \text{Tamaño de la tangente} \quad T = R \text{tg}(I/2)$$

$$25. \text{Cuerda del arco} \quad C = 2R \text{sen}(I/2)$$

$$26. \text{Ordenada media} \quad M = R \text{senver}(I/2)$$

$$27. \text{Externa} \quad E = R \text{exsec}(I/2)$$

$$28. \text{Radio} \quad R = T \cot(I/2)$$

$$29. \text{Tangente a la curva de 1 grado} = 1145.9 \text{ tg}(I/2)$$

$$30. \text{Externa a la curva de 1 grado} = 1145.9 \text{ exsec}(I/2) \\ = T \text{tg}(I/4) = 1145.9 \text{ tg}(I/4) \text{tg}(I/2)$$

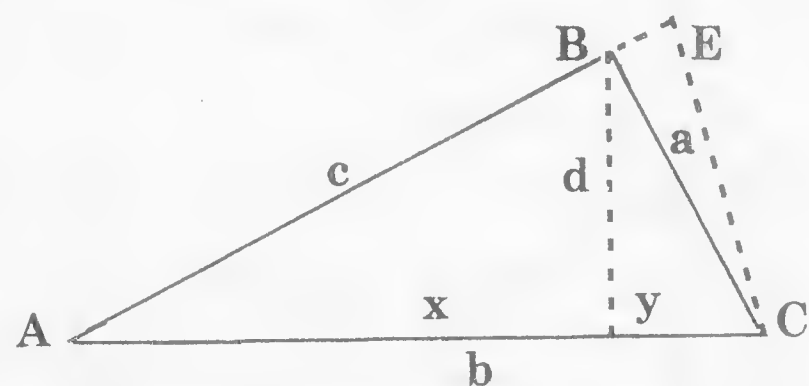
TABLA I

Fórmulas Trigonométricas

SOLUCION DE TRIANGULOS OBLICUOS

Para evitar confusión de símbolos; "A" y "a" representan el ángulo más pequeño y su lado opuesto respectivamente. "B" y "b" los mayores, dejando a "C" y "c" para representar a los intermedios. Sin embargo, este orden no siempre puede ser observado con las fórmulas 34 y 35.

Fig. 2



	DADO	PEDIDO	FORMULAS
31	Dos Ang's	3er Ang.	3er Ang. = $180 - (\text{Suma de los dos ang. dados})$
32	A, B, a	b	$b = \frac{a \sin B}{\sin A}$; $\therefore c = \frac{a \sin C}{\sin A}$
	B, C, b	c	$c = \frac{b \sin C}{\sin B}$; $\therefore a = \frac{b \sin A}{\sin B}$
	C, A, c	a	$a = \frac{c \sin A}{\sin C}$; $\therefore b = \frac{c \sin B}{\sin C}$
33	a, b, c	A, C	Considere el lado más largo "b" dividido por la normal "d" en dos segmentos "x" e "y". Si "d" parte de "B" se tiene la siguiente proporción: $\frac{b}{c+a} = \frac{c-a}{x-y}$ $\therefore x \cdot y = \frac{(c+a)(c-a)}{b}$ $\therefore \cos A = \frac{x}{c} \cos C = \frac{y}{a}$ $\cos A = \frac{b^2 + c^2 - a^2}{2bc} \cos C = \frac{b^2 + a^2 - c^2}{2ab}$
34	a, B, c	$\frac{C-A}{2}$	$\text{tg } \frac{C-A}{2} = \frac{c-a}{c+a} \text{tg } \frac{C+A}{2}$
	A, b, c	C, a	$c \cos A = x$; $b-x = y$; $c \sin A = d$ $\therefore \text{tg } C = \frac{d}{y}$; $a = \frac{C}{\sin C}$
35	a, b, A	B, c	$\sin B = \frac{b \sin A}{a}$; $c = \frac{a \sin C}{\sin A}$

Recuerde: Un ángulo y su suplemento tienen el mismo seno. Como B y E Fig. 2

TABLA II

Radios de las curvas métricas

Grados por cadena de 20 m.				D.	R.	Log. R.	d. m.
D.	Radio de la curva R.	Logaritmo del radio Log. R.	Deflexión por metro d. m.				
0° 10	6875.5	3.8373 04	0.25	2° 0	572.99	2.7581 45	3.00
12	5729.6	7581 23	0.30	2	563.59	7509 67	3.05
14	4911.1	6911 76	0.35	4	554.51	7439 06	3.10
16	4297.2	6331 84	0.40	6	545.70	7369 58	3.15
18	3819.7	5820 32	0.45	8	537.18	7301 19	3.20
20	3437.8	5362 74	0.50	10	528.92	7233 86	3.25
22	3125.2	4948 82	0.55	12	520.90	7167 57	3.30
24	2864.8	4570 94	0.60	14	513.13	7102 27	3.35
26	2644.4	4223 32	0.65	16	505.58	7037 93	3.40
28	2455.5	3901 47	0.70	18	498.26	6974 54	3.45
30	2291.8	3601 84	0.75	20	491.14	6912 06	3.50
32	2148.6	3321 55	0.80	22	484.22	6850 46	3.55
34	2022.2	3058 27	0.85	24	477.50	6789 73	3.60
36	1909.9	2810 03	0.90	26	470.96	6729 84	3.65
38	1809.3	2575 23	0.95	28	464.60	6670 76	3.70
40	1718.9	2352 46	1.00	30	458.40	6612 47	3.75
42	1637.0	2140 57	1.05	32	452.37	6554 96	3.80
44	1562.6	1938 54	1.10	34	446.50	6498 19	3.85
46	1494.7	1745 49	1.15	36	440.78	6442 17	3.90
48	1432.4	1560 66	1.20	38	435.20	6386 85	3.95
50	1371.1	1383 38	1.25	40	429.76	6332 23	4.00
52	1322.2	1213 05	1.30	42	424.45	6278 29	4.05
54	1273.3	1049 15	1.35	44	419.28	6225 01	4.10
56	1227.8	0891 21	1.40	46	414.23	6172 38	4.15
58	1185.4	0738 81	1.45	48	409.30	6120 38	4.20
1° 0	1145.9	0591 58	1.50	50	404.48	6068 99	4.25
2	1109.0	0449 18	1.55	52	399.78	6018 21	4.30
4	1074.3	0311 30	1.60	54	395.19	5968 01	4.35
6	1041.8	0177 67	1.65	56	390.70	5918 39	4.40
8	1011.1	0048 02	1.70	58	386.31	5869 32	4.45
10	982.23	2.9922 13	1.75	3° 0'	382.02	5820 81	4.50
12	954.95	9799 79	1.80	2	377.82	5772 83	4.55
14	929.14	9680 81	1.85	4	373.71	5725 38	4.60
16	904.69	9564 99	1.90	6	369.70	5678 44	4.65
18	881.49	9452 19	1.95	8	365.76	5632 00	4.70
20	859.46	9342 24	2.00	10	361.91	5586 06	4.75
22	838.49	9235 00	2.05	12	358.15	5540 59	4.80
24	818.53	9130 35	2.10	14	354.45	5495 60	4.85
26	799.50	9028 17	2.15	16	350.84	5451 07	4.90
28	781.33	8928 33	2.20	18	347.30	5406 99	4.95
30	763.97	8830 74	2.25	20	343.82	5363 35	5.00
32	747.36	8735 29	2.30	22	340.42	5320 15	5.05
34	731.46	8641 90	2.35	24	337.08	5277 37	5.10
36	716.22	8550 47	2.40	26	333.81	5235 02	5.15
38	701.60	8460 93	2.45	28	330.60	5193 07	5.20
40	687.57	8373 19	2.50	30	327.46	5151 52	5.25
42	674.09	8287 20	2.55	32	324.37	5110 37	5.30
44	661.13	8202 87	2.60	34	321.34	5069 60	5.35
46	648.66	8120 15	2.65	36	318.36	5029 22	5.40
48	636.65	8038 98	2.70	38	315.44	4989 20	5.45
50	625.07	7959 30	2.75	40	312.58	4949 55	5.50
52	613.91	7881 05	2.80	42	309.76	4910 26	5.55
54	603.14	7804 19	2.85	44	307.00	4871 33	5.60
56	592.74	7728 66	2.90	46	304.28	4832 74	5.65
58	582.70	7654 43	2.95	48	301.61	4794 49	5.70
				50	298.99	4756 57	5.75
				52	296.41	4718 98	5.80
				54	293.88	4681 72	5.85
				56	291.39	4644 77	5.90
				58	288.94	4608 14	5.95

TABLA II

Radios de las curvas métricas

D.	R.	Log. R.	d. m.	D.	R.	Log. R.	d. m.
4° 0'	286.54	2. 4571 81	6.00'	6° 0'	191.07	2. 2812 00	9.00'
2	284.17	4535 78	6.05	2	190.02	2787 96	9.05
4	281.84	4500 05	6.10	4	188.98	2764 05	9.10
6	279.55	4464 61	6.15	6	187.94	2740 28	9.15
8	277.30	4429 46	6.20	8	186.92	2716 63	9.20
10	275.08	4394 60	6.25	10	185.91	2693 12	9.25
12	272.90	4360 01	6.30	12	184.92	2669 73	9.30
14	270.75	4325 69	6.35	14	183.93	2646 46	9.35
16	268.64	4291 64	6.40	16	182.95	2623 33	9.40
18	266.55	4257 86	6.45	18	181.98	2600 31	9.45
20	264.51	4224 34	6.50	20	181.03	2577 41	9.50
22	262.49	4191 08	6.55	22	180.08	2554 64	9.55
24	260.50	4158 07	6.60	24	179.14	2531 98	9.60
26	258.54	4125 31	6.65	26	178.22	2509 45	9.65
28	256.61	4092 79	6.70	28	177.30	2487 03	9.70
30	254.71	4060 52	6.75	30	176.39	2464 72	9.75
32	252.84	4028 48	6.80	32	175.49	2442 53	9.80
34	251.00	3996 68	6.85	34	174.60	2420 45	9.85
36	249.18	3965 11	6.90	36	173.72	2398 49	9.90
38	247.39	3933 77	6.95	38	172.85	2376 63	9.95
40	245.62	3902 66	7.00	40	171.98	2354 89	10.00
42	243.88	3871 77	7.05	42	171.13	2333 25	10.05
44	242.16	3841 09	7.10	44	170.28	2311 72	10.10
46	240.47	3810 63	7.15	46	169.45	2290 30	10.15
48	238.80	3780 38	7.20	48	168.62	2268 99	10.20
50	237.16	3750 35	7.25	50	167.79	2247 77	10.25
52	235.53	3720 52	7.30	52	166.98	2226 67	10.30
54	233.93	3690 89	7.35	54	166.18	2205 66	10.35
56	232.35	3661 46	7.40	56	165.38	2184 76	10.40
58	230.70	3632 24	7.45	58	164.59	2163 95	10.45
5° 0'	229.26	3603 20	7.50	7° 0'	163.80	2143 25	10.50
2	227.74	3574 37	7.55	2	163.03	2122 64	10.55
4	226.24	3545 72	7.60	4	162.26	2102 13	10.60
6	224.76	3517 26	7.65	6	161.50	2081 72	10.65
8	223.30	3488 98	7.70	8	160.75	2061 41	10.70
10	221.87	3460 89	7.75	10	160.00	2041 19	10.75
12	220.44	3432 98	7.80	12	159.26	2021 06	10.80
14	219.04	3405 25	7.85	14	158.53	2001 03	10.85
16	217.66	3377 70	7.90	16	157.80	1981 08	10.90
18	216.29	3350 32	7.95	18	157.08	1961 24	10.95
20	214.94	3323 11	8.00	20	156.37	1941 48	11.00
22	213.60	3296 07	8.05	22	155.66	1921 81	11.05
24	212.29	3269 20	8.10	24	154.96	1902 23	11.10
26	210.98	3242 49	8.15	26	154.27	1882 74	11.15
28	209.70	3215 95	8.20	28	153.58	1863 33	11.20
30	208.43	3189 57	8.25	30	152.90	1844 01	11.25
32	207.17	3163 35	8.30	32	152.22	1824 78	11.30
34	205.93	3137 28	8.35	34	151.55	1805 64	11.35
36	204.71	3111 37	8.40	36	150.89	1786 57	11.40
38	203.50	3085 62	8.45	38	150.23	1767 60	11.45
40	202.30	3060 02	8.50	40	149.58	1748 70	11.50
42	201.12	3034 57	8.55	42	148.93	1729 89	11.55
44	199.95	3009 27	8.60	44	148.29	1711 16	11.60
46	198.80	2984 11	8.65	46	147.66	1692 51	11.65
48	197.66	2959 10	8.70	48	147.03	1673 93	11.70
50	196.53	2934 23	8.75	50	146.40	1655 44	11.75
52	195.41	2909 51	8.80	52	145.78	1637 03	11.80
54	194.31	2884 93	8.85	54	145.17	1618 70	11.85
56	193.22	2860 48	8.90	56	144.56	1600 44	11.90
58	192.14	2836 17	8.95	58	143 95	1582 26	11.95

TABLA II

Radios de las curvas métricas

D.	R.	Log. R.	d. m.	D.	R.	Log. R.	d. m.
8° 0'	143.36	2. 1564 15	12.00	10° 0'	114.74	2. 0597 04	15.00
2	142.76	1546 13	12.05	2	114.36	0582 62	15.05
4	142.17	1528 17	12.10	4	113.98	0568 26	15.10
6	141.59	1510 29	12.15	6	113.60	0553 94	15.15
8	141.01	1492 49	12.20	8	113.23	0539 67	15.20
10	140.44	1474 75	12.25	10	112.86	0525 44	15.25
12	139.87	1457 09	12.30	12	112.49	0511 26	15.30
14	139.30	1439 51	12.35	14	112.13	0497 13	15.35
16	138.74	1421 99	12.40	16	111.76	0483 04	15.40
18	138.18	1404 54	12.45	18	111.40	0469 00	15.45
20	137.63	1387 17	12.50	20	111.05	0455 01	15.50
22	137.08	1369 86	12.55	22	110.69	0441 06	15.55
24	136.54	1352 62	12.60	24	110.34	0427 16	15.60
26	136.00	1335 45	12.65	26	109.98	0413 30	15.65
28	135.47	1318 35	12.70	28	109.63	0399 48	15.70
30	134.94	1301 32	12.75	30	109.29	0385 71	15.75
32	134.41	1284 35	12.80	32	108.94	0371 99	15.80
34	133.89	1267 45	12.85	34	108.60	0358 30	15.85
36	133.37	1250 62	12.90	36	108.26	0344 66	15.90
38	132.86	1233 85	12.95	38	107.92	0331 07	15.95
40	132.35	1217 15	13.00	40	107.58	0317 51	16.00
42	131.84	1200 51	13.05	42	107.25	0304 00	16.05
44	131.34	1183 93	13.10	44	106.92	0290 53	16.10
46	130.84	1167 42	13.15	46	106.59	0277 11	16.15
48	130.35	1150 97	13.20	48	106.26	0263 72	16.20
50	129.85	1134 58	13.25	50	105.93	0250 38	16.25
52	129.37	1118 26	13.30	52	105.61	0237 07	16.30
54	128.88	1101 99	13.35	54	105.29	0223 81	16.35
56	128.40	1085 79	13.40	56	104.97	0210 59	16.40
58	127.93	1069 65	13.45	58	104.65	0197 41	16.45
9° 0'	127.45	1053 57	13.50	11° 0'	104.33	0184 27	16.50
2	126.99	1037 54	13.55	2	104.02	0171 17	16.55
4	126.52	1021 58	13.60	4	103.71	0158 11	16.60
6	126.06	1005 68	13.65	6	103.40	0145 09	16.65
8	125.60	0989 83	13.70	8	103.09	0132 11	16.70
10	125.14	0974 04	13.75	10	102.78	0119 17	16.75
12	124.69	0958 31	13.80	12	102.48	0106 26	16.80
14	124.24	0942 64	13.85	14	102.17	0093 40	16.85
16	123.79	0927 03	13.90	16	101.87	0080 57	16.90
18	123.35	0911 47	13.95	18	101.57	0067 78	16.95
20	122.91	0895 96	14.00	20	101.28	0055 03	17.00
22	122.48	0890 51	14.05	22	100.98	0042 32	17.05
24	122.04	0865 12	14.10	24	100.68	0029 64	17.10
26	121.61	0849 78	14.15	26	100.39	0017 01	17.15
28	121.19	0834 50	14.20	28	100.10	0004 40	17.20
30	120.76	0819 27	14.25	30	99.69	1. 9986 37	17.25
32	120.34	0804 09	14.30	32	99.40	9973 81	17.30
34	119.92	0788 97	14.35	34	99.11	9961 29	17.35
36	119.51	0773 90	14.40	36	98.83	9948 80	17.40
38	119.09	0758 88	14.45	38	98.55	9936 35	17.45
40	118.68	0743 91	14.50	40	98.26	9923 93	17.50
42	118.28	0729 00	14.55	42	97.98	9911 55	17.55
44	117.87	0714 13	14.60	44	97.71	9899 21	17.60
46	117.47	0699 32	14.65	46	97.43	9886 90	17.65
48	117.07	0684 56	14.70	48	97.15	9874 63	17.70
50	116.68	0669 85	14.75	50	96.88	9862 38	17.75
52	116.28	0655 19	14.80	52	96.61	9850 18	17.80
54	115.89	0640 58	14.85	54	96.34	9838 01	17.85
56	115.51	0626 02	14.90	56	96.07	9825 87	17.90
58	115.12	0611 50	14.95	58	95.80	9813 77	17.95

* Curvas de menos de 100 m de radio deben localizarse por medias cadenas o cuerdas de 10 m

TABLA II

Radios de las curvas métricas

D.	R.	Log. R.	d. m.	D.	R.	Log. R.	d. m.
12° 0'	95.54	1. 9801 70	18.00'	14° 0'	81.90	1. 9132 95	21.00
2	95.27	9789 66	18.05	10	80.94	9081 62	21.25
4	95.01	9777 66	18.10	20	80.00	9030 89	21.50
6	94.75	9765 69	18.15	30	79.08	8980 74	21.75
8	94.49	9753 75	18.20	40	78.18	8931 18	22.00
10	94.23	9741 85	18.25	50	77.31	8882 17	22.25
12	93.97	9729 98	18.30	15° 0'	76.45	8833 71	22.50
14	93.72	9718 14	18.35	10	75.61	8785 80	22.75
16	93.46	9706 33	18.40	20	74.79	8738 40	23.00
18	93.21	9694 56	18.45	30	73.99	8691 52	23.25
				40	73.20	8645 14	23.50
				50	72.43	8599 26	23.75
20	92.96	9682 82	18.50				
22	92.71	9671 11	18.55	16° 0'	71.68	8553 85	24.00
24	92.46	9659 43	18.60	10	70.94	8508 92	24.25
24	92.21	9647 78	18.65	20	70.22	8464 45	24.50
28	91.96	9636 16	18.70	30	69.51	8420 44	24.75
30	91.72	9624 58	18.75	40	68.82	8376 87	25.00
32	91.47	9613 03	18.80	50	68.14	8333 73	25.25
34	91.23	9601 50	18.85	17° 0'	67.47	8291 02	25.50
36	90.99	9590 01	18.90	10	66.81	8248 73	25.75
38	90.75	9578 55	18.95	20	66.17	8206 85	26.00
				30	65.54	8165 37	26.25
40	90.51	9567 11	19.00	40	64.93	8124 28	26.50
42	90.28	9555 71	19.05	50	64.32	8083 58	26.75
44	90.04	9544 34	19.10				
46	89.80	9533 00	19.15	18° 0'	63.73	8043 27	27.00
48	89.57	9521 68	19.20	10	63.14	8003 32	27.25
50	89.34	9510 40	19.25	20	62.57	7963 74	27.50
52	89.11	9499 15	19.30	30	62.01	7924 53	27.75
54	88.88	9487 92	19.35	40	61.46	7885 66	28.00
56	88.65	9476 73	19.40	50	60.91	7847 14	28.25
58	88.42	9465 56	19.45	19° 0'	60.38	7808 97	28.50
13° 0'	88.19	9454 42	19.50	10	59.86	7771 12	28.75
2	87.97	9443 31	19.55	20	59.34	7733 61	29.00
4	87.75	9432 23	19.60	30	58.84	7696 42	29.25
6	87.52	9421 18	19.65	40	58.34	7659 55	29.50
8	87.30	9410 15	19.70	50	57.85	7622 99	29.75
10	87.08	9399 16	19.75				
12	86.86	9388 19	19.80	20° 0'	57.37	7586 74	30.00
14	86.64	9377 25	19.85	10	56.90	7550 79	30.25
16	86.42	9366 33	19.90	20	56.43	7515 14	30.50
18	86.21	9355 45	19.95	30	55.97	7479 78	30.75
				40	55.52	7444 71	31.00
20	85.99	9344 59	20.00	50	55.08	7409 92	31.25
22	85.78	9333 76	20.05	21° 0'	54.64	7375 41	31.50
24	85.56	9322 95	20.10	10	54.21	7341 18	31.75
26	85.35	9312 18	20.15	20	53.79	7307 21	32.00
28	85.14	9301 42	20.20	30	53.38	7278 51	32.25
30	84.93	9290 70	20.25	40	52.97	7240 08	32.50
32	84.72	9280 00	20.30	50	52.56	7206 90	32.75
34	84.51	9269 33	20.35	22° 0'	52.17	7173 97	33.00
36	84.31	9258 69	20.40	10	51.78	7141 30	33.25
38	84.10	9248 07	20.45	20	51.39	7108 87	33.50
40	83.90	9237 47	20.50	30	51.01	7076 68	33.75
42	83.69	9226 91	20.55	40	50.64	7044 73	34.00
44	83.49	9216 37	20.60	50	50.27	7013 02	34.25
46	83.29	9205 85	20.65	23° 0'	49.91	6981 54	34.50
48	83.09	9195 36	20.70	10	49.55	6950 29	34.75
50	82.89	9184 89	20.75	20	49.20	6919 26	35.00
52	82.69	9174 46	20.80	30	48.85	6888 46	35.25
54	82.49	9164 04	20.85	40	48.51	6857 88	35.50
56	82.29	9153 65	20.90	50	48.17	6827 51	35.75
58	82.10	9143 29	20.95	24° 0'	47.83	6797 35	36.00

* Curvas de menos de 100 m de radio deben localizarse por medias cadenas o cuerdas de 10 m

TABLA III

Tangentes y externas a curvas de grado 1

Angulo	Tang.	Externa	Angulo	Tang.	Externa	Angulo	Tang.	Externa
1°	10.00	.044	11°	110.3	5.30	21°	212.4	19.52
10	11.67	.059	10'	112.0	5.46	10'	214.1	19.83
20	13.33	.078	20	113.7	5.63	20	215.8	20.15
30	15.00	.098	30	115.4	5.79	30	217.6	20.47
40	16.67	.121	40	117.1	5.96	40	219.3	20.79
50	18.34	.147	50	118.8	6.14	50	221.0	21.12
2	20.00	.175	12	120.4	6.31	22	222.7	21.45
10	21.67	.205	10	122.1	6.49	10	224.5	21.78
20	23.34	.238	20	123.8	6.67	20	226.2	22.11
30	25.00	.273	30	125.5	6.85	30	227.9	22.45
40	26.67	.310	40	127.2	7.04	40	229.7	22.79
50	28.34	.350	50	128.9	7.22	50	231.4	23.13
3	30.01	.393	13	130.6	7.41	23	233.1	23.48
10	31.68	.438	10	132.2	7.61	10	234.9	23.82
20	33.34	.485	20	133.9	7.80	20	236.6	24.17
30	35.01	.535	30	135.6	8.00	30	238.4	24.53
40	36.68	.587	40	137.3	8.20	40	240.1	24.88
50	38.35	.641	50	139.0	8.40	50	241.8	25.24
4	40.02	.698	14	140.7	8.61	24	243.6	25.60
10	41.69	.758	10	142.4	8.81	10	245.3	25.96
20	43.35	.820	20	144.1	9.02	20	247.1	26.33
30	45.02	.884	30	145.8	9.23	30	248.8	26.70
40	46.69	.951	40	147.5	9.45	40	250.6	27.07
50	48.36	1.02	50	149.2	9.67	50	252.3	27.45
5	50.03	1.09	15	150.9	8.89	25	254.0	27.82
10	51.70	1.17	10	152.6	10.11	10	255.8	28.20
20	53.37	1.24	20	154.3	10.34	20	257.5	28.59
30	55.04	1.32	30	155.9	10.56	30	259.3	28.97
40	56.71	1.40	40	157.6	10.79	40	261.1	29.36
50	58.38	1.49	50	159.3	11.03	50	262.8	29.75
6	60.06	1.57	16	161.0	11.26	26	264.6	30.14
10	61.73	1.66	10	162.7	11.50	10	266.3	30.54
20	63.40	1.75	20	164.4	11.74	20	268.1	30.94
30	65.07	1.85	30	166.1	11.98	30	269.8	31.34
40	66.74	1.94	40	167.8	12.23	40	271.6	31.74
50	68.42	2.04	50	169.6	12.48	50	273.4	32.15
7	70.09	2.14	17	171.3	12.73	27	275.1	32.56
10	71.76	2.24	10	173.0	12.98	10	276.9	32.97
20	73.43	2.35	20	174.7	13.24	20	278.6	33.39
30	75.11	2.46	30	176.4	13.49	30	280.4	33.81
40	76.78	2.57	40	178.1	13.75	40	282.2	34.23
50	78.46	2.68	50	179.8	14.02	50	283.9	34.65
8	80.13	2.80	18	181.5	14.28	28	285.7	35.08
10	81.81	2.92	10	183.2	14.55	10	287.5	35.51
20	83.48	3.04	20	184.9	14.82	20	289.3	35.94
30	85.16	3.16	30	186.6	15.10	30	291.0	36.38
40	86.83	3.29	40	188.3	15.37	40	292.8	36.82
50	88.51	3.41	50	190.0	15.65	50	294.6	37.26
9	90.19	3.54	19	191.8	15.93	29	296.4	37.70
10	91.86	3.68	10	193.5	16.22	10	298.1	38.15
20	93.54	3.81	20	195.2	16.50	20	299.9	38.60
30	95.22	3.95	30	196.9	16.79	30	301.7	39.05
40	96.90	4.09	40	198.6	17.09	40	303.5	39.51
50	98.58	4.23	50	200.3	17.38	50	305.3	39.96
10	100.3	4.38	20	202.1	17.68	30	307.1	40.42
10	101.9	4.52	10	203.8	17.98	10	308.8	40.89
20	103.6	4.67	20	205.5	18.28	20	310.6	41.35
30	105.3	4.83	30	207.2	18.58	30	312.4	41.82
40	107.0	4.98	40	208.9	18.89	40	314.2	42.30
50	108.7	5.14	50	210.7	19.20	50	316.0	42.77

TABLA III

Tangentes y externas a curvas de grado 1

Angulo	Tang.	Externa	Angulo	Tang.	Externa	Angulo	Tang.	Externa
31°	317.8	43.25	41°	428.4	77.48	51°	546.6	123.7
10'	319.6	43.73	10'	430.3	78.14	10'	548.6	124.6
20	321.4	44.22	20	432.2	78.80	20	550.7	125.4
30	323.2	44.70	30	434.2	79.49	30	552.7	126.3
40	325.0	45.19	40	436.1	80.16	40	554.8	127.2
50	326.8	45.68	50	438.0	80.84	50	556.8	128.1
32	328.6	46.18	42	439.9	81.53	52	558.9	129.0
10	330.4	46.68	10	411.8	82.21	10	561.0	129.9
20	332.2	47.18	20	443.7	82.90	20	563.0	130.8
30	334.0	47.69	30	445.6	83.60	30	565.1	131.8
40	335.8	48.19	40	447.5	84.30	40	567.2	132.7
50	337.6	48.70	50	449.5	85.00	50	569.3	133.6
33	339.4	49.22	43	451.4	85.70	53	571.3	134.5
10	341.3	49.73	10	453.3	86.11	10	573.4	135.5
20	343.1	50.25	20	455.2	87.12	20	575.5	136.4
30	344.9	50.77	30	457.2	87.83	30	577.6	137.3
40	346.7	51.30	40	459.1	88.55	40	579.7	138.3
50	348.5	51.83	50	461.0	89.27	50	581.8	139.2
34	350.3	52.36	44	463.0	90.00	54	583.9	140.2
10	352.2	52.89	10	464.9	90.72	10	586.0	141.1
20	354.0	53.43	20	466.9	91.45	20	588.1	142.1
30	355.8	53.97	30	468.8	92.19	30	590.2	143.1
40	357.6	54.52	40	470.8	92.93	40	592.3	144.0
50	359.5	55.06	50	472.7	93.67	50	594.4	145.0
35	361.3	55.61	45	474.7	94.42	55	596.5	146.0
10	363.1	56.16	10	476.6	95.16	10	598.7	146.9
20	365.0	56.72	20	478.6	95.92	20	600.8	147.9
30	366.8	57.28	30	480.5	96.67	30	602.9	148.9
40	368.7	57.84	40	482.5	97.43	40	605.0	149.9
50	370.5	58.40	50	484.5	98.20	50	607.2	150.9
36	372.3	58.97	46	486.4	98.96	56	609.3	151.9
10	374.2	59.54	10	488.4	99.73	10	611.4	152.9
20	376.0	60.12	20	490.4	100.5	20	613.6	153.9
30	377.9	60.69	30	492.3	101.3	30	615.7	154.9
40	379.7	61.27	40	494.3	102.1	40	617.9	155.0
50	381.6	61.86	50	496.3	102.8	50	620.0	157.0
37	383.4	62.44	47	498.3	103.6	57	622.2	158.0
10	385.3	63.03	10	500.2	104.4	10	624.3	159.0
20	387.1	63.63	20	502.2	105.2	20	626.5	160.1
30	389.0	64.22	30	504.2	106.0	30	628.7	161.1
40	390.9	64.82	40	506.2	106.8	40	630.8	162.2
50	392.7	65.42	50	508.2	107.6	50	633.0	163.2
38	394.6	66.03	48	510.2	108.4	58	635.2	164.3
10	396.4	66.64	10	512.2	109.3	10	637.4	165.3
20	398.3	67.25	20	514.2	110.1	20	639.6	166.4
30	400.2	67.86	30	516.2	110.9	30	641.8	167.5
40	402.0	68.48	40	518.2	111.7	40	643.9	168.5
50	403.9	69.10	50	520.2	112.5	50	646.1	169.6
39	405.8	69.73	49	522.2	113.4	59	648.3	170.7
10	407.7	70.36	10	524.2	114.2	10	650.5	171.8
20	409.6	70.99	20	526.3	115.1	20	652.7	172.9
30	411.4	71.62	30	528.3	115.9	30	655.0	174.0
40	413.3	72.26	40	530.3	116.8	40	657.2	175.1
50	415.2	72.90	50	532.3	117.6	50	659.4	176.2
40	417.1	73.54	50	534.4	118.5	60	661.6	177.3
10	419.0	74.19	10	536.4	119.3	10	663.8	178.4
20	420.9	74.84	20	538.4	120.2	20	666.1	179.5
30	422.8	75.49	30	540.5	121.0	30	668.3	180.6
40	424.7	76.15	40	542.5	121.9	40	670.5	181.8
50	426.5	76.81	50	544.5	122.8	50	672.8	182.9

TABLA III

Tangentes y externas a curvas de grado 1

Angulo	Tang.	Externa	Angulo	Tang.	Externa	Angulo	Tang.	Externa
61°	675.0	184.0	71°	817.4	261.6	81°	978.7	361.1
10'	677.3	185.2	10'	819.9	263.1	10'	981.6	362.9
20	679.5	186.3	20	822.4	264.6	20	984.5	364.8
30	681.8	187.5	30	825.0	266.1	30	987.4	366.7
40	684.0	188.6	40	827.5	267.5	40	990.3	368.6
50	686.3	189.8	50	830.0	269.0	50	993.5	370.5
62	688.5	190.9	72	832.6	270.5	82	996.1	372.4
10	690.8	192.1	10	835.1	272.0	10	999.1	374.4
20	693.1	193.3	20	837.7	273.5	20	1002.0	376.3
30	695.4	194.5	30	840.2	275.0	30	1005.0	378.2
40	697.7	195.7	40	842.8	276.6	40	1007.9	380.2
50	699.9	196.9	50	845.4	278.1	50	1010.9	382.1
63	702.2	198.0	73	847.9	279.6	83	1013.8	384.1
10	704.5	199.3	10	850.5	281.1	10	1016.8	386.1
20	706.8	200.5	20	853.1	282.7	20	1019.8	388.1
30	709.1	201.7	30	855.7	284.2	30	1022.8	390.1
40	711.4	202.9	40	858.3	285.8	40	1025.8	392.0
50	713.7	204.1	50	860.9	287.4	50	1028.8	394.1
64	716.1	205.3	74	863.5	288.9	84	1031.8	396.1
10	718.4	206.6	10	866.1	290.5	10	1034.8	398.1
20	720.7	207.8	20	868.8	292.1	20	1037.9	400.1
30	723.0	209.0	30	871.4	293.7	30	1040.9	402.2
40	725.4	210.3	40	874.0	295.3	40	1043.9	404.2
50	727.7	211.5	50	876.7	296.9	50	1047.0	406.3
65	730.0	212.8	75	879.3	298.5	85	1050.1	408.3
10	732.4	214.0	10	882.0	300.1	10	1053.1	410.4
20	734.7	215.3	20	884.6	301.7	20	1056.2	412.5
30	737.1	216.6	30	887.3	303.3	30	1059.3	414.6
40	739.4	217.9	40	889.9	305.0	40	1062.4	416.7
50	741.8	219.1	50	892.6	306.6	50	1065.5	418.8
66	744.2	220.4	76	895.3	308.3	86	1068.6	420.9
10	746.5	221.7	10	898.0	309.9	10	1071.7	423.1
20	748.9	223.0	20	900.7	311.6	20	1074.8	425.2
30	751.3	224.3	30	903.4	313.3	30	1078.0	427.3
40	753.7	225.6	40	906.1	314.9	40	1081.1	429.5
50	756.1	227.0	50	908.8	317.6	50	1084.3	431.7
67	758.5	228.3	77	911.5	318.3	87	1087.4	433.8
10	760.9	229.6	10	914.2	320.0	10	1090.6	436.0
20	763.3	230.9	20	917.0	321.7	20	1093.8	438.2
30	765.7	232.3	30	919.7	323.4	30	1097.0	440.4
40	768.1	233.6	40	922.4	325.1	40	1100.2	442.6
50	770.5	235.0	50	925.2	326.9	50	1103.4	444.9
68	772.9	236.3	78	928.0	328.6	88	1106.6	447.1
10	775.4	237.7	10	930.7	330.3	10	1109.8	449.3
20	777.8	239.0	20	933.5	332.1	20	1113.1	451.6
30	780.2	240.4	30	936.3	333.8	30	1116.3	453.9
40	782.7	241.8	40	939.0	335.6	40	1119.6	456.1
50	785.1	243.2	50	941.8	337.4	50	1123.8	458.4
69	787.6	244.5	79	944.6	339.2	89	1126.1	460.7
10	790.0	245.9	10	947.4	340.9	10	1129.4	463.0
20	792.5	247.3	20	950.2	342.7	20	1132.7	465.3
30	795.0	248.7	30	953.1	344.5	30	1136.0	467.6
40	797.4	250.2	40	955.9	346.3	40	1139.3	470.0
50	799.9	251.6	50	958.7	348.2	50	1142.6	472.3
70	802.4	253.0	80	961.5	350.0	90	1145.9	474.7
10	804.9	254.4	10	964.4	351.8	10	1149.3	477.0
20	807.4	255.9	20	967.2	353.6	20	1152.6	479.4
30	809.9	257.3	30	970.1	355.5	30	1156.0	481.8
40	812.4	258.7	40	973.0	357.3	40	1159.3	484.2
50	814.9	260.2	50	975.8	359.2	50	1162.7	486.6

TABLA III

Tangentes y externas a curvas de grado 1

Angulo	Tang.	Externa	Angulo	Tang.	Externa	Angulo	Tang.	Externa
91°	1166.1	489.0	101°	1390.1	655.6	111°	1667.3	877.2
10'	1169.5	491.4	10'	1394.3	658.8	10'	1672.5	881.5
20	1172.9	493.9	20	1398.4	662.0	20	1677.8	885.8
30	1176.3	496.3	30	1402.5	665.2	30	1683.0	890.2
40	1179.8	498.8	40	1406.7	668.5	40	1688.3	894.5
50	1183.2	501.2	50	1410.9	671.7	50	1693.6	898.9
92	1186.6	503.7	102	1415.1	675.0	112	1698.9	903.3
10	1190.1	506.2	10	1419.3	678.2	10	1704.3	907.8
20	1193.6	508.7	20	1423.6	681.5	20	1709.6	912.2
30	1197.1	511.2	30	1427.8	684.9	30	1715.0	916.7
40	1200.5	513.7	40	1432.1	688.2	40	1720.4	921.2
50	1204.0	516.3	50	1436.3	691.5	50	1725.9	925.7
93	1207.6	518.8	103	1440.6	694.9	113	1731.3	930.8
10	1211.1	521.4	10	1444.9	698.3	10	1736.8	934.8
20	1214.6	523.9	20	1449.3	701.6	20	1742.3	939.4
30	1218.2	526.5	30	1453.6	705.0	30	1747.8	944.1
40	1221.7	529.1	40	1458.0	708.5	40	1753.4	948.7
50	1225.3	531.7	50	1462.3	711.9	50	1759.0	953.4
94	1228.9	534.3	104	1466.7	715.4	114	1764.6	958.1
10	1232.4	536.9	10	1471.1	718.8	10	1770.2	962.8
20	1236.0	539.6	20	1475.6	722.3	20	1775.9	967.6
30	1239.7	542.2	30	1480.0	725.8	30	1781.5	972.3
40	1243.3	544.9	40	1484.4	729.4	40	1787.3	977.1
50	1246.9	547.6	50	1488.9	732.9	50	1793.0	982.0
95	1250.6	550.3	105	1493.4	736.5	115	1798.8	986.8
10	1254.2	553.0	10	1497.9	740.0	10	1804.5	991.7
20	1257.9	555.7	20	1502.4	743.6	20	1810.3	996.6
30	1261.6	558.4	30	1507.0	747.2	30	1816.2	1001.6
40	1265.3	561.1	40	1511.5	750.9	40	1822.1	1006.5
50	1269.0	563.9	50	1516.1	754.5	50	1828.0	1011.5
96	1272.7	566.6	106	1520.7	758.2	116	1833.9	1016.5
10	1276.4	569.4	10	1525.3	761.9	10	1839.8	1021.6
20	1280.1	572.2	20	1529.9	765.6	20	1845.8	1026.7
30	1283.9	575.0	30	1534.6	769.3	30	1851.8	1031.8
40	1287.7	577.8	40	1539.3	773.0	40	1857.8	1036.9
50	1291.5	580.6	50	1543.9	776.8	50	1863.9	1042.1
97	1295.2	583.5	107	1548.6	780.6	117	1870.0	1047.2
10	1299.0	586.3	10	1553.4	784.4	10	1876.1	1052.5
20	1302.9	589.2	20	1558.1	788.2	20	1882.3	1057.7
30	1306.7	592.1	30	1562.9	792.0	30	1888.4	1063.0
40	1310.5	594.9	40	1567.6	795.9	40	1894.6	1068.3
50	1314.4	597.8	50	1572.4	799.7	50	1900.9	1073.6
98	1318.2	600.8	108	1577.2	803.6	118	1907.1	1079.0
10	1322.1	603.7	10	1582.1	807.6	10	1913.4	1084.4
20	1326.0	606.6	20	1586.9	811.5	20	1919.8	1089.8
30	1329.9	609.6	30	1591.8	815.4	30	1926.1	1095.3
40	1333.8	612.6	40	1596.7	819.4	40	1932.5	1100.8
50	1337.8	615.5	50	1601.6	823.4	50	1938.9	1106.3
99	1341.7	618.5	109	1606.5	827.4	119	1945.4	1111.9
10	1345.7	621.5	10	1611.5	831.5	10	1951.9	1117.5
20	1349.6	624.6	20	1616.5	835.5	20	1958.4	1123.1
30	1353.6	627.6	30	1621.6	839.6	30	1965.0	1128.8
40	1357.6	630.7	40	1626.5	843.7	40	1971.5	1134.5
50	1361.6	633.7	50	1631.5	847.8	50	1978.2	1140.2
100	1365.7	636.8	110	1636.6	851.9	120	1984.8	1145.9
10	1369.7	639.9	10	1641.6	856.1	10	1991.5	1151.7
20	1373.8	643.0	20	1646.7	860.3	20	1998.2	1157.5
30	1377.8	646.2	30	1651.9	864.5	30	2005.0	1163.4
40	1381.9	649.3	40	1657.0	868.7	40	2011.8	1169.3
50	1386.0	652.5	50	1662.2	873.0	50	2018.6	1175.2

Pagina II

TABLA III

Tangentes y externas a curvas de grado 1

Angulo	Tang.	Externa	Angulo	Tang.	Externa	Angulo	Tang.	Externa
121°	2025.4	1181.2	125°	2201.3	1335.8	129°	2402.5	1515.9
10'	2032.3	1187.2	10'	2209.2	1342.7	10'	2411.5	1524.0
20	2039.2	1193.2	20	2217.0	1349.7	20	2420.6	1532.2
30	2046.2	1199.3	30	2225.0	1356.8	30	2429.7	1540.5
40	2053.2	1205.4	40	2232.9	1363.9	40	2438.9	1548.8
50	2060.2	1211.6	50	2241.0	1371.0	50	2448.2	1557.1
122	2067.3	1217.7	126	2249.0	1378.2	130	2457.5	1565.6
10	2074.4	1224.0	10	2257.1	1385.4	10	2466.8	1574.0
20	2081.6	1230.2	20	2265.3	1392.7	20	2476.2	1582.6
30	2088.8	1236.5	30	2273.5	1400.0	30	2485.7	1591.2
40	2096.0	1242.9	40	2281.7	1407.4	40	2495.3	1599.9
50	2103.2	1249.2	50	2290.0	1414.8	50	2504.9	1603.6
123	2110.5	1255.6	127	2298.4	1422.3	131	2514.5	1617.4
10	2117.9	1262.1	10	2306.8	1429.8	10	2524.2	1626.2
20	2125.3	1268.6	20	2315.2	1437.4	20	2534.0	1635.2
30	2132.7	1275.1	30	2323.7	1445.0	30	2543.9	1644.1
40	2140.1	1281.7	40	2332.3	1452.7	40	2553.8	1653.2
50	2147.6	1288.3	50	2340.9	1460.4	50	2563.8	1662.3
124	2155.2	1295.0	128	2349.5	1468.1	132	2573.8	1671.5
10	2162.8	1301.7	10	2358.2	1476.0	10	2583.9	1680.7
20	2170.4	1308.4	20	2367.0	1483.8	20	2594.1	1690.0
30	2178.1	1315.2	30	2375.8	1491.8	30	2604.3	1699.4
40	2185.8	1322.0	40	2384.6	1499.7	40	2614.6	1708.8
50	2193.5	1328.9	50	2393.5	1507.8	50	2625.0	1718.3

Correcciones para las Tangentes, añada

Angulo	3° Cur.	5° Cur.	7° Cur.	9° Cur.	11° Cur.	12° Cur.	14° Cur.	16° Cur.	18° Cur.	20° Cur.	22° Cur.	24° Cur.
10°	.00	.01	.01	.01	.01	.00	.00	.00	.01	.01	.01	.01
20°	.01	.01	.02	.02	.03	.01	.01	.01	.01	.01	.01	.02
30°	.01	.02	.03	.03	.04	.01	.01	.02	.02	.02	.02	.02
40°	.01	.03	.04	.05	.06	.02	.02	.02	.02	.03	.03	.03
50°	.02	.03	.05	.06	.07	.02	.02	.03	.03	.03	.04	.04
60°	.02	.04	.06	.08	.09	.02	.03	.03	.04	.04	.05	.05
70°	.03	.05	.07	.09	.11	.03	.03	.04	.05	.05	.06	.06
80°	.03	.06	.08	.11	.13	.04	.04	.05	.05	.06	.07	.07
90°	.04	.07	.10	.13	.16	.04	.05	.06	.06	.07	.08	.09
100°	.05	.09	.12	.15	.19	.05	.06	.07	.08	.09	.10	.10
110°	.06	.10	.14	.19	.23	.06	.07	.08	.09	.10	.11	.12
120°	.07	.12	.17	.23	.28	.07	.09	.10	.11	.12	.14	.15
130°	.08	.15	.21	.28	.34	.09	.11	.12	.14	.15	.17	.19

Correcciones para Externas. Añada

Angulo	3° Cur.	5° Cur.	7° Cur.	9° Cur.	11° Cur.	12° Cur.	14° Cur.	16° Cur.	18° Cur.	20° Cur.	22° Cur.	24° Cur.
20°	.001	.001	.002	.002	.002	.001	.001	.001	.001	.001	.001	.001
30°	.001	.002	.004	.005	.006	.001	.002	.002	.002	.003	.003	.003
40°	.002	.004	.006	.008	.010	.003	.003	.004	.004	.005	.005	.006
50°	.004	.007	.010	.013	.016	.001	.005	.006	.007	.007	.008	.009
60°	.006	.011	.015	.020	.025	.006	.008	.009	.010	.011	.012	.013
70°	.01	.02	.02	.03	.04	.01	.01	.01	.01	.02	.02	.02
80°	.01	.02	.03	.04	.05	.01	.02	.02	.02	.02	.02	.03
90°	.02	.03	.04	.05	.07	.02	.02	.02	.03	.03	.03	.04
100°	.02	.04	.06	.07	.09	.02	.03	.03	.04	.04	.04	.05
110°	.03	.05	.07	.10	.12	.03	.04	.04	.05	.05	.06	.07
120°	.04	.07	.10	.13	.16	.04	.05	.06	.06	.07	.08	.09
130°	.05	.10	.14	.18	.22	.06	.07	.08	.09	.10	.11	.12

Pagina I2

TABLA IV Cuerdas a un radio 1, para trazo de ángulos

Angulo	0'	10'	20'	30'	40'	50'	DIFERENCIAS				
							2'	4'	6'	8'	10'
0°	.0000	.0029	.0058	.0087	.0116	.0145	6	12	17	23	29
1°	.0175	.0204	.0233	.0262	.0291	.0320					
2°	.0349	.0378	.0407	.0436	.0465	.0494					
3°	.0524	.0553	.0582	.0611	.0640	.0669					
4°	.0698	.0727	.0756	.0785	.0814	.0843					
5°	.0872	.0901	.0931	.0960	.0989	.1018					
6°	.1047	.1076	.1105	.1134	.1163	.1192					
7°	.1221	.1250	.1279	.1308	.1337	.1366					
8°	.1395	.1424	.1453	.1482	.1511	.1540					
9°	.1569	.1598	.1627	.1656	.1685	.1714					
10°	.1743	.1772	.1801	.1830	.1859	.1888					
11°	.1917	.1946	.1975	.2004	.2033	.2062					
12°	.2091	.2119	.2148	.2177	.2206	.2235					
13°	.2264	.2293	.2322	.2351	.2380	.2409					
14°	.2437	.2466	.2495	.2524	.2553	.2582					
15°	.2611	.2639	.2668	.2697	.2726	.2755					
16°	.2783	.2812	.2841	.2870	.2899	.2927					
17°	.2956	.2985	.3014	.3042	.3071	.3100					
18°	.3129	.3157	.3186	.3215	.3244	.3272	6	11	17	23	29
19°	.3301	.3330	.3358	.3387	.3416	.3444					
20°	.3473	.3502	.3530	.3559	.3587	.3616					
21°	.3645	.3673	.3702	.3730	.3759	.3788					
22°	.3816	.3845	.3873	.3902	.3930	.3959					
23°	.3987	.4016	.4044	.4073	.4101	.4130	6	11	17	23	28
24°	.4158	.4187	.4215	.4244	.4272	.4300					
25°	.4329	.4357	.4386	.4414	.4442	.4471					
26°	.4499	.4527	.4556	.4584	.4612	.4641					
27°	.4669	.4697	.4725	.4754	.4782	.4810					
28°	.4838	.4867	.4895	.4923	.4951	.4979					
29°	.5008	.5036	.5064	.5092	.5120	.5148					
30°	.5176	.5204	.5233	.5261	.5289	.5317	6	11	17	22	28
31°	.5345	.5373	.5401	.5429	.5457	.5485					
32°	.5513	.5541	.5569	.5597	.5625	.5652					
33°	.5680	.5708	.5736	.5764	.5792	.5820					
34°	.5847	.5875	.5903	.5931	.5959	.5986					
35°	.6014	.6042	.6070	.6097	.6125	.6153					
36°	.6180	.6208	.6236	.6263	.6291	.6319					
37°	.6346	.6374	.6401	.6429	.6456	.6484					
38°	.6511	.6539	.6566	.6594	.6621	.6649	5	11	16	22	27
39°	.6676	.6704	.6731	.6758	.6786	.6813					
40°	.6840	.6868	.6895	.6922	.6950	.6977					
41°	.7004	.7031	.7059	.7086	.7113	.7140					
42°	.7167	.7195	.7222	.7249	.7276	.7303					
43°	.7330	.7357	.7384	.7411	.7438	.7465					
44°	.7492	.7519	.7546	.7573	.7600	.7627					

Las diferencias estan en diez milésimos del Radio

TABLA IV Cuerdas a un radio 1, para trazo de ángulos

Angulo	0'	10'	20'	30'	40'	50'	DIFERENCIAS				
							2'	4'	6'	8'	10'
45°	.7654	.7681	.7707	.7734	.7761	.7788	5	11	16	21	27
46°	.7815	.7841	.7868	.7895	.7922	.7948					
47°	.7975	.8002	.8028	.8055	.8082	.8108					
48°	.8135	.8161	.8188	.8214	.8241	.8267					
49°	.8294	.8320	.8347	.8373	.8400	.8426	5	11	16	21	26
50°	.8452	.8479	.8505	.8531	.8558	.8584					
51°	.8610	.8636	.8663	.8689	.8715	.8741	5	10	16	21	26
52°	.8767	.8794	.8820	.8846	.8872	.8898					
53°	.8924	.8950	.8976	.9002	.9028	.9054					
54°	.9080	.9106	.9132	.9157	.9183	.9209					
55°	.9235	.9261	.9287	.9312	.9338	.9364	5	10	15	21	26
56°	.9389	.9415	.9441	.9466	.9492	.9518					
57°	.9543	.9569	.9594	.9620	.9645	.9671	5	10	15	20	26
58°	.9696	.9722	.9747	.9772	.9798	.9823	5	10	15	20	25
59°	.9848	.9874	.9899	.9924	.9950	.9975					
60°	1.0000	1.0025	1.0050	1.0075	1.0101	1.0126					
61°	1.0151	1.0176	1.0201	1.0226	1.0251	1.0276					
62°	1.0301	1.0326	1.0351	1.0375	1.0400	1.0425					
63°	1.0450	1.0475	1.0500	1.0524	1.0549	1.0574					
64°	1.0598	1.0623	1.0648	1.0672	1.0697	1.0721					
65°	1.0746	1.0771	1.0795	1.0819	1.0844	1.0868	5	10	15	20	24
66°	1.0893	1.0917	1.0942	1.0966	1.0990	1.1014	5	10	15	19	24
67°	1.1039	1.1063	1.1087	1.1111	1.1136	1.1166					
68°	1.1184	1.1208	1.1232	1.1256	1.1280	1.1304	5	10	14	19	24
69°	1.1328	1.1352	1.1376	1.1400	1.1424	1.1448					
70°	1.1472	1.1495	1.1519	1.1543	1.1567	1.1590					
71°	1.1614	1.1638	1.1661	1.1685	1.1709	1.1732	5	9	14	19	24
72°	1.1756	1.1779	1.1803	1.1826	1.1850	1.1873	5	9	14	19	23
73°	1.1896	1.1920	1.1943	1.1966	1.1990	1.2013					
74°	1.2036	1.2060	1.2083	1.2106	1.2129	1.2152					
75°	1.2175	1.2198	1.2221	1.2244	1.2267	1.2290	5	9	14	18	23
76°	1.2313	1.2336	1.2359	1.2382	1.2405	1.2428					
77°	1.2450	1.2473	1.2496	1.2518	1.2541	1.2564					
78°	1.2586	1.2609	1.2632	1.2654	1.2677	1.2699					
79°	1.2722	1.2744	1.2766	1.2789	1.2811	1.2833	4	9	13	18	22
80°	1.2856	1.2878	1.2900	1.2922	1.2945	1.2967					
81°	1.2989	1.3011	1.3033	1.3055	1.3077	1.3099					
82°	1.3121	1.3143	1.3165	1.3187	1.3209	1.3231	4	9	13	17	22
83°	1.3252	1.3274	1.3296	1.3318	1.3339	1.3361					
84°	1.3383	1.3404	1.3426	1.3447	1.3469	1.3490					
85°	1.3512	1.3533	1.3555	1.3576	1.3597	1.3619	4	9	13	17	21
86°	1.3640	1.3661	1.3682	1.3704	1.3725	1.3746	4	8	13	17	21
87°	1.3767	1.3788	1.3809	1.3830	1.3851	1.3872					
88°	1.3893	1.3914	1.3935	1.3956	1.3977	1.3997					
89°	1.4018	1.4039	1.4060	1.4080	1.4101	1.4122	4	8	12	17	21

Las diferencias están en diez milésimos del Radio

Don't fail to
- support him

Hi Tom;

This is Bob Reitzma, the friend of Saint
Vin France doing ornithological field work
in the Montes Azules Biosphere Reserve of
Chiapas, Mexico. We met briefly one after-
noon during your short but sweet visit
to the Biological station here in the Reserve.
I enjoyed ^{I enjoyed} chatting with you. ^{too good} to
Remember? Hope so. Time ^{didn't} allow for
a whole lot ^{more} of chatting and I forgot to ask you
about how the Min. Tr. Ecosystem project was
going in Amazema. Your role in that
project probably has diminished some since
your job switch but I'm sure you know
~~about~~ what's going on there anyway. An am-
bition of mine is to be involved in field
work in Amazema some time and I for-
got to tap into your experience and ask
you for any names, places, etc. to get in
touch with regarding this ambition. If
you have can suggest ^{any thing} or any one,
I'd appreciate it if you could get it down and
send it to New Hampshire along with Iain
& Anne's address. ~~At least~~ the very
least the address would be appreciated
(and is probably the most important).

Thanks tons! Again, GREAT chatting
with you and the others. It changed me up.
^{Folks can be} Nice to know the more well-known ^{folks}
^{like to know} of this world ~~are~~ ^{can be} very pleasant
as well

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I ~~am~~ wish for you continued sanity
 in your very demanding but extremely
 important work. Keep on keepin on bro!
 Peace, Bob

1 AFR Ed's Portero
 2 AFR 2/4 Sa Air cadm Im Anag

